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R. M. Martin

The Indian Empire

II







THE VILLAGE OF ...







THE GREAT TEMPLE OF THE MOUNTAINS, YAMOTO, JAPAN



































THE GREAT HALL, THE GREAT HALL, THE GREAT HALL









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THE CARAVAN ON THE MOUNTAINS OF INDIA









Fig. 1. A. C. 1850.

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THE TEMPLE OF VENUS AT CAPUA









View of the Ruins of the Temple of the Sun at Lima, Peru.

AMERICAN GEOGRAPHICAL SOCIETY







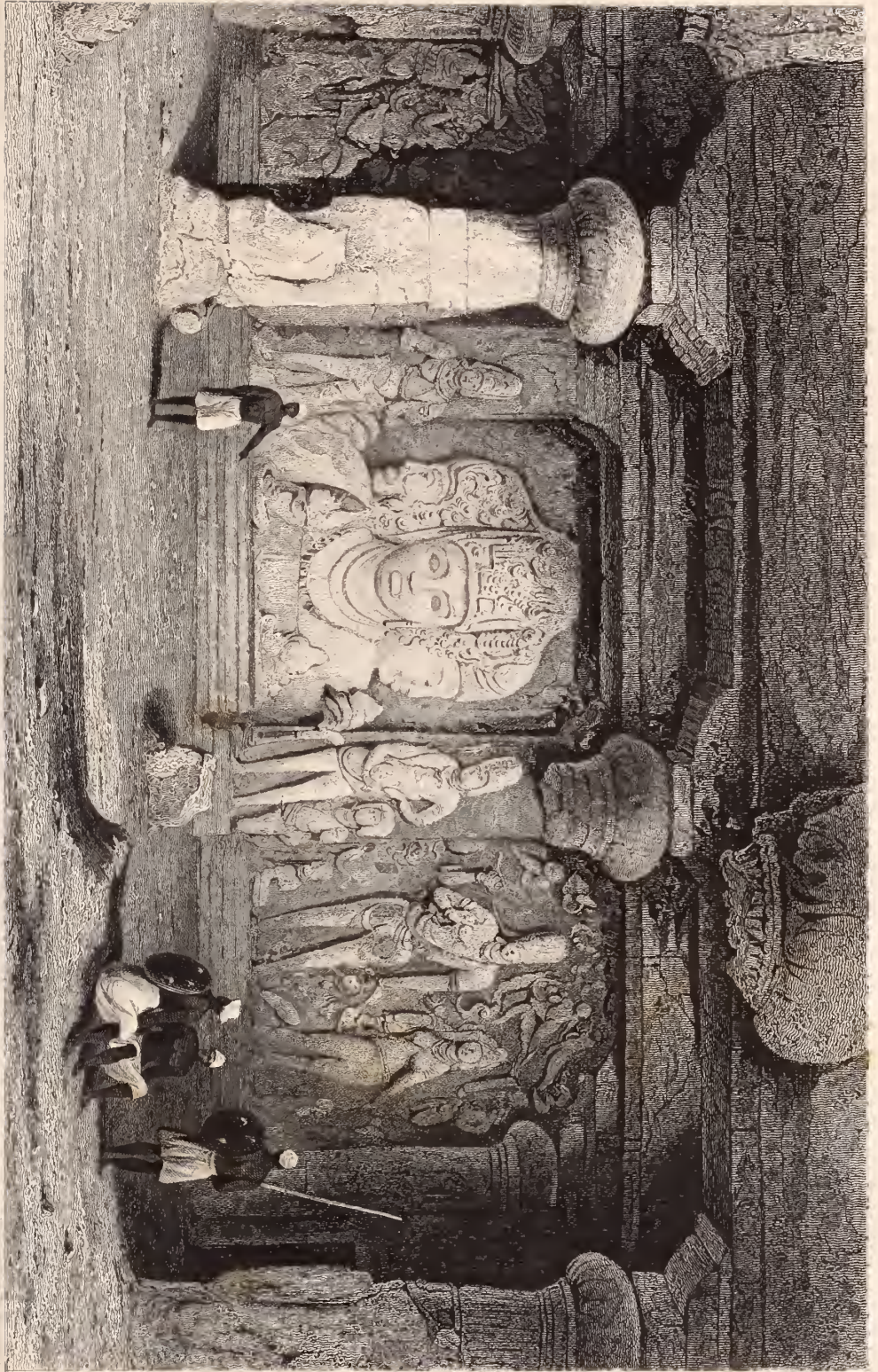
VIEW OF THE TOWN OF DAMASCUS, SYRIA, FROM THE WATER.

W. H. STONE











failure, and escort his majesty back to Loodiana, or if he thought fit, leave him to take his chance among his own countrymen. An open confession of error, however mortifying, would have been incalculably wiser than following up one false step with a multitude of others. In 1839 a portion of the troops returned to Calcutta. The commander-in-chief, Sir John Keane, immediately proceeded to England, where he was elevated to the peerage by the title of Baron Keane of Ghuznee, and further remunerated by a pension of £2,000 per ann. for himself and his two next heirs male. The governor-general, from a baron, was made an earl. Mr. Macnaghten was created a baronet, and orders of the Bath were bestowed, not with the most discriminating hand.\*

The winter of 1839 passed in tolerable tranquillity. The British took military possession of the country by establishing garrisons in the cities of Cabool and Candahar, and in the principal posts on the main roads to Hindoostan—viz., Ghuznee and Quettah on the west, Jellalabad and Ali-Musjid on the east. Some minor detachments were left in various other isolated positions; thus dividing a force which, united, was scarcely sufficient for its own protection. Moreover, the military authorities in Cabool, instead of retaining their position in the Balla Hissar, were induced to build costly and indefensible cantonments on the adjacent plain, in compliance with the scruples of Shah Soojah, who soon began to feel his throne somewhat too closely hedged in by foreign troops. The first flush of triumph over, he could not but find it a weary thing to live shut up in a fortress, despised by his own subjects; and as he looked forth from the Balla Hissar on the city beneath, he said "everything appeared to him shrunk small and miserable; and that the Cabool of his old age in no respect corresponded with the recollections of the Cabool of his youth."

The yearnings of romance were soon swallowed up in real dangers. Insurrections took place in various quarters. Dost Mohammed again appeared in arms, and several sharp encounters took place in the course of the year 1840; but the Afghans, despite some partial successes, offered no combined or systematic resistance. The Dost, after making a brave and successful stand at Purwan in November, thought the time had arrived when he

might, with a good grace, surrender himself to the English (into whose hands the ladies of his family had already fallen.) Turning from the field of battle in despair, he galloped towards Cabool, and twenty-four hours spent on the saddle, brought him face to face with the British envoy, who was returning homeward from an evening ride. Dost Mohammed sprang to the ground, tendered his sword, and claimed protection as a voluntary captive. The kindly peace-loving nature of Sir William had been sadly warped since he had exchanged the ordinary routine of official duties and scholarly recreations for the arduous post of counsellor to Shah Soojah; and immediately before this unlooked-for greeting, he had been inquiring with regard to the Dost—"Would it be justifiable to set a price on this fellow's head?" for "it appears that he meditates fighting with us so long as the breath is in his body." But the chivalrous bearing of the defeated Ameer banished all harsh thoughts. Sir William refused the proffered sword; and when the Dost was sent as a state prisoner to Hindoostan, actually advocated his being provided for by the British authorities "more handsomely than Shah Soojah had been," for the following memorable reason:—"The Shah had no claim upon us. We had no hand in depriving him of his kingdom; whereas, we ejected the Dost, who never offended us, in support of our policy, of which he was the victim." Lord Auckland tacitly admitted the fact by receiving the deposed ruler with extreme courtesy, and burdening the Indian population with a new pension of two lacs, or about £20,000 per ann. for his support. At this time the revenues of Cabool, gathered by force of arms, did not exceed fifteen lacs, and barely paid the ordinary expenses of government. The Anglo-Afghan treasury was well-nigh exhausted, and there were grounds for doubting whether the E. I. Cy. would not think a million and a quarter a-year too dear a price to pay for the maintenance of their nominee at Cabool. The reduction of outgoings was attempted by the diminution of the "black mail" paid to certain Khilji chiefs for checking the excesses committed by the predatory tribes who infested the passes. The experiment proved very dangerous; the Khiljies assumed a haughty tone; the Kojucks, and many tribes of whose very names the English had until now remained in happy ignorance, rose in

\* Dennie's services at Ghuznee were overlooked.

what was misnamed "rebellion" against Shah Soojah. In Kohistan and the Khyber, that region of snowy precipices and roaring torrents, where every man is a good marksman behind his native rock, more than usual excitement prevailed. The British envoy, considering with some reason the state of Afghanistan to be at the best of times one of chronic unrest, paid too little heed to the numerous signs of an approaching crisis which alarmed Shah Soojah. The noses of the Dourani Khans (or lords) had, Macnaghten said, been brought to the grindstone, and all was quiet, from Dan to Beersheba.\* Impressed with this agreeable conviction, he prepared to resign his position, and return to Hindoostan to fill the honourable station of governor of Bombay. His intended successor, Sir Alexander Burnes, had long ardently desired the office of envoy; but from the conflicting and contradictory character both of his official and private statements, it is difficult to say what his actual opinions were concerning the condition of the country and the feelings of the people. He must have known that the military occupation of Afghanistan (of necessity sufficiently unpopular) had been rendered peculiarly hateful and galling by his own unbridled licentiousness, and by that of other officers, whose example was closely imitated by the mass of the European soldiery. Lady Macnaghten, Lady Sale, and other Englishwomen resided within the cantonments, yet their presence did not check the excesses, the terrible retribution for which they were soon to share. Shah Soojah, whom Macnaghten declared to be "the best and ablest man in his dominions,"† and whose fidelity was evinced by the warnings he repeatedly gave the English authorities of the impending danger, and his entreaties that they would take up their abode in the Balla Hissar, remonstrated forcibly against the immorality of the officers, and pointed out the

indignation which it excited among his countrymen. "I told the envoy," writes the Shah to Lord Auckland, January, 1842, "what was going on, and was not listened to. I told him that complaints were daily made to me of Afghan women being taken to Burnes' moonshee (Mohun Lal), and of their drinking wine at his house, and of women being taken to the chaonee, and of my having witnessed it."‡ Kaye states, "the scandal was open, undisguised, notorious. Redress was not to be obtained. The evil was not in course of suppression. It went on till it became intolerable; and the injured then began to see that the only remedy was in their own hands."§

That remedy was the death of the leading offender, and the expulsion of the English from Afghanistan. Warnings of various kinds were not wanting; but they passed unheeded. The week fixed for the departure of the envoy arrived, and preparations were made for his journey, and for the comfort of his successor in office, and of the other functionaries during the coming winter, which was expected to pass like the two former ones, in a succession of pastimes, including shooting, card-playing, drinking,|| and various amusements, innocent or otherwise, according to the tastes and habits of those concerned. On the evening of the 1st November, 1841, Burnes formally congratulated Macnaghten on his approaching departure during a period of profound tranquillity.¶ At that very time a party of chiefs were assembled close at hand discussing in full conclave the means of redressing their national and individual wrongs. At daybreak on the following morning, Burnes was aroused by the message of a friendly Afghan, informing him of approaching danger, and bidding him quit the city and seek safety in the Balla Hissar or the cantonments. The vizier of Shah Soojah followed on the same errand, but all in vain; the doomed man sent to ask mili-

\* News had arrived at Cabool, in the course of the summer, which greatly relieved the apprehensions of Macnaghten and Burnes, both of whom had a tendency to look out for dangers from afar, rather than guard against those by which they were immediately surrounded. The raising of the siege of Herat had only temporarily allayed their fears of Russian aggression, which were soon aroused by the dispatch of a powerful force, under General Peroffski, ostensibly directed against the man-stealing, slave-holding principality of Khiva, but it was believed, intended to act offensively against the English. Whatever the true design may have been, it was frustrated by the intense cold and inaccessible character

of the country, which, together with pestilence, nearly destroyed the Russian army, and compelled Peroffski to turn back without reaching Khiva.

† Kaye, i., 533. ‡ *Idem*, ii., 364. § *Idem*, i., 615.

|| Dost Mohammed prohibited the sale of a fiery spirit distilled from the grape. The English restored the Armenian manufacturers to full employment.

¶ It is asserted, that on the same day, intelligence so clear and full of a hostile confederacy had been given to Burnes, that he exclaimed the time had come for the British to leave the country. Burnes was impulsive, vacillating, ambitious, and unprincipled. It is possible that he deceived himself sometimes: it is certain that he constantly misled Macnaghten.

tary support, and persisted in remaining in his own abode, which adjoined that of Captain Johnson, paymaster of the Shah's forces. This officer was absent in cantonments, but the treasury was under the care of the usual sepoy guard, and they were ready and even desirous to fire on the insurgents. Burnes refused to give the necessary orders, in the hope of receiving speedy succour; meanwhile the crowd of stragglers grew into an infuriated mob, and his attempted harangue from the balcony was silenced by loud clamours and reproaches. Two officers had slept that night in the house of Sir Alexander: one of them, Lieutenant Broadfoot, prepared to sell his life dearly, and it is asserted, slew no less than six of his assailants before a ball struck him to the ground a corpse; the other, Lieutenant Charles Burnes, remained beside his brother while the latter offered redress of grievances, and a heavy ransom to the populace as the price of their joint lives. But in vain; the outraged Afghans loved vengeance better than gold; and after setting fire to the stables, a party of them burst into the garden, where they were fired upon by the sepoys under Lieutenant Burnes. Sir Alexander disguised himself in native attire, and strove to escape, but was recognised, or rather betrayed by the Cashmerian who had induced him to make the attempt. A fearful shout arose from the party in the garden on discovering his presence—"This is Secunder (Alexander) Burnes!" and in a few moments both brothers were cut to pieces by Afghan knives. The sepoys in charge of the treasury fought desperately, and surrendered their charge only with their lives. Massacre followed pillage; every man, woman, and child (Hindoo and Afghan) found in the two English dwellings perished;\* finally, the buildings were fired; and all this with 6,000 British troops within half-an-hour's march of the city. The only energetic attempt made to check the insurrectionary movement emanated from the Shah, and was performed by one of his sons; but it proved unsuccessful, and the British authorities displayed an apathy quite inexplicable, even supposing the outbreak to have been directly occasioned by the ill conduct of its chief victim. General Elphinstone, the commander-in-chief, was an officer of high character, and of brave and kindly bearing;

but increasing physical infirmities pressed heavily on him; and before the catastrophe he had applied for his recall from Afghanistan, where, indeed, he ought never to have been sent. Between him and Maenaghten no sympathy existed: they could not understand each other, and never acted in concert. The one was despondent and procrastinating, the other hopeful and energetic, but too much given to diplomacy. The consequence of this tendency was the adoption of various compromising measures when the occasion loudly called for the most active and straightforward policy. Post after post was captured from the British in the immediate vicinity of Cabool, and it soon became evident that the out-stations were in extreme peril; for the insurrection, from being local, speedily became general. The "frightful extent" of the cantonments (erected before Elphinstone's arrival), the loss of a fort four hundred yards distant, in which the commissariat stores had been most improvidently placed, together with the deficiency of artillery, so disheartened and unnerved the general, that he suffered day after day to pass without any decisive effort to gain possession of the city, and began to urge on Maenaghten the propriety of making terms with the enemy. The king remained shut up in the Balla Hissar, "like grain between two millstones." He was a man of advanced age and weak purpose, and the hostility of his subjects being avowedly directed against the Feringhees, he strove to keep his crown upon his head, and his head upon his shoulders, by a trimming policy, which rendered him an object of distrust to both parties, and cost him eventually life as well as honour. Avarice had grown on him, and he beheld with extreme annoyance the sums of money lavished by the British envoy in the futile attempt to buy off the more influential of the confederate chiefs. The urgent solicitations of Elphinstone, the growing difficulty of obtaining supplies for the troops, the unsatisfactory results of daily petty hostilities, and the non-arrival of the reinforcements of men and money solicited by Macnaghten from Hindoostan, at length induced him to offer to evacuate Afghanistan on honourable terms. The tone adopted by the chiefs was so arrogant and offensive, that the conference came to an abrupt termination; both parties being resolved to resume hostilities sooner than abate their respective pretensions. During the interview a strange

\* Moonshee Mohun Lal, who did "the dirty work of the British diplomatists," made his escape.—(Kaye.)

scene took place outside the cantonments. Thinking that a treaty of peace was being concluded by their leaders, the British and Afghan soldiery gave vent to their joy in mutual congratulations. The Europeans lent over the low walls (misnamed defences), conversing familiarly with their late foes, and even went out unarmed among them, and thankfully accepted presents of vegetables. The result of the meeting between the envoy and the chiefs was the renewal of strife, and the men whose hands had been so lately joined in friendly greetings, were again called on to shed each other's blood for the honour of their respective countries. The English troops showed so little inclination for the work, that Macnaghtan angrily designated them a "pack of despicable cowards," and was soon compelled to reopen his negotiations with the enemy. Affairs were in this precarious condition when Akber Khan returned to Cabool, after more than two years of exile and suffering. His reappearance caused no additional anxiety to the beleaguered English; on the contrary, the fact that the ladies of the family of the young Barukzye were, with his father, prisoners in Hindoostan, inspired a hope that he might be made the means of procuring favourable terms from the hostile leaders who, on their part, welcomed the return of the favourite son of the Dost with extreme delight. Akber (styled by Roebuck the "Wallace of Cabool") was, beyond doubt, a favourable specimen of an Afghan chief, strikingly handsome in face and figure, full of life and energy, joyous in peace, fearless in war, freedom-loving, deeply attached to his father and his country, susceptible of generous impulses, but uneducated and destitute of self-control. For some time he took no leading part against the English, and neither aided nor opposed the dominant party in formally setting aside the authority of Shah Soojah, and proclaiming as king in his stead the Nawab Mohammed Zemaun Khan, a cousin of the late Cabool chief. The selection was fortunate for the English, the Nawab being a humane and honourable man, well inclined to grant them acceptable terms of evacuation; and his turbulent and quarrelsome adherents were, after much discussion, induced to sign a treaty, the stipulations of which, mutual distrust prevented from being fulfilled by either party. The English consented to surrender the fortresses they still retained in Afghanistan, and their cannon, on con-

dition of receiving a supply of beasts of burden from the enemy, to facilitate their march. Shah Soojah was to be allowed to return with them or to remain in Cabool, with the miserable stipend of a lac of rupees per annum; and one moment he resolved on accompanying the retreating army, while the next he declared it his intention to remain where he was, and wait a new turn of events. In either mood, he declaimed, with reason, against the folly of his allies in divesting themselves of the means of defence, asking indignantly whether any people in the world ever before gave their enemies the means of killing them? The officers in charge of Candahar and Jellalabad (Nott and Sale) took the same view of the case; and, arguing that the order of surrender must have been forcibly extorted from General Elphinstone, positively refused to abandon their positions. The treaty was thus placed in abeyance, and the troops in cantonment lived on from day to day, frittering away their resources, and growing hourly more desponding; while Macnaghten, Elphinstone, and the second in command, Brigadier Shelton, passed the precious hours in angry discussion. The ill-health of the general, increased by a painful wound caused by a musket-ball, obliged him to delegate many duties to Shelton, an officer of great personal courage, but overbearing and prejudiced, with the especial defect of being unable to sympathise with the sufferings, or appreciate the noble devotion of the much-tried native troops. The civilian is said to have been the truest soldier in the camp; but he had no confidence in his colleagues, and his own powers of mind and body were fast sinking beneath the load of anxiety which had so suddenly banished the delusion (sedulously cherished by the unhappy Burnes to the last day of his life) of the tranquil submission of Afghanistan to a foreign yoke. Never had day-dreamer a more terrible awakening. Incensed by the refusal of the holders of inferior posts to obey his orders, and by the non-fulfilment of the promises made by the Barukzye chiefs of carriage cattle, Macnaghten, chafed almost to madness, was ready to follow any *ignis fatuus* that should present a hope of escape for himself and the 16,000 men whose lives trembled in the balance. Although ostensibly bound by treaty with the Barukzyes, he was ready to side with Doorani or Populzye, Khilji or Kuzzilbash, or, in a word, to join any native faction able to

afford cordial co-operation. In this mood he lent a willing ear to a communication made to him on the evening of 22nd Dec., 1841. The proposal was that Akber and the Khiljies should unite with the British for the seizure of the person of Ameen-oollah Khan, a leading Barukzye chief, and a party to the late agreement, whose head, for a certain sum of money, would be laid at the feet of the envoy. Happily for his own honour and that of his country, Macnaghten rejected the proposition so far as the life of the chief was concerned,\* but was prepared to aid in his capture without the preliminary measure of declaring the treaty void. The envoy gave a written promise for the evacuation of Afghanistan in the coming spring; Shah Soojah was to be left behind, with Akber for his vizier; and the representative of the British government further guaranteed to reward the services of Akber by an annuity of £40,000 a-year, and a bonus of no less than £300,000.

On the following morning Macnaghten sent for the officers of his staff (Capts. Lawrence, Trevor, and Mackenzie), and, in an excited but determined tone, bade them accompany him to a conference with Akber: lastly, he informed the general of his intentions, desiring that two regiments might be got ready for service, and, to some extent, explaining the matter in hand. Elphinstone asked what part Nawab Zemaun Khan, and other leading Barukzyes, were expected to take? "None," was the reply; "they are not in the plot." The old general was scrupulously honest, and the word grated on his ear. But Macnaghten would listen to neither remonstrance nor entreaty. Impatiently turning aside from the feeble but chivalrous veteran, he exclaimed—"I understand these things better than you;" and rode off to the fatal interview,—not, however, without some misgiving as to its result; for he declared to his companions, that come what would, a thousand deaths were preferable to the life he had of late been leading. The meeting commenced in apparent courtesy; Macnaghten offered Akber a noble Arab horse, which the young chief accepted with thanks, at the same time acknowledg-

\* The same right principle had not been invariably adhered to during the Afghan war, and the chiefs had good grounds for suspecting that blood-money had been offered for their lives. John Conolly (one of three brothers who followed the fortunes of their uncle, Sir W. Macnaghten, and like him, never lived to return to India), addressed from the Balla Hissar repeated injunctions to Mohun Lal,

ing the gift of a pair of double-barrelled pistols, sent on the previous day, which he wore at his girdle. The whole party, English and Afghans, dismounted, and seated themselves on cloths spread on some snow-clad hillocks, near the Cabool river, and about 600 yards from the cantonments. Macnaghten stretched himself at full length on the bank; Trevor and Mackenzie seated themselves beside him; but Lawrence knelt on one knee, ready for action. There was abundant cause for suspicion: the presence of a brother of Ameen-oollah, the excited and eager manner of the Afghans, and the numbers gathering round the English, drew from Lawrence and Mackenzie a remark that such intrusion was not consistent with a private conference. "They are all in the secret," said Akber; and, as he spoke, the envoy and his companions were violently seized from behind. Resistance was hopeless: their slender escort of sixteen men galloped back to cantonments to avoid being slain, save one who perished nobly in attempting to join his masters; the three *attachés* were made prisoners; but Macnaghten commenced a desperate struggle with Akber Khan, and a cry being raised that the troops were marching to the rescue, the young Barukzye, in extreme excitement, drew a pistol from his girdle, and shot the donor through the body. A party of fanatical Ghazees came up, flung themselves on the fallen envoy, and hacked him to pieces with their knives. Trevor slipped from the horse of the chief who was bearing him away captive, and shared the fate of his leader; and the other two officers were saved with difficulty by Akber Khan, who, remorseful for his late act, "drew his sword and laid about him right manfully"† for the defence of the prisoners against the infuriated crowd.

While the mangled remains of the victims were being paraded through the streets and great bazaar of the city, the military leaders remained in their usual apathetic state; nor was it until the morrow that authentic information was received of the catastrophe. Major Eldred Pottinger, on whom the office of political agent devolved, entreated the authorities assembled in

to offer from ten to fifteen thousand rupees for the heads of certain leading chiefs; and, in the cases of Abdoollah Khan and Meer Musjedee, the rewards were actually claimed but not accorded; nor do the offers of Conolly appear to have been made with the concurrence or even cognizance of Macnaghten, much less with that of Elphinstone.—(Kaye, ii., 57—104.)

† Capt. Mackenzie's words.—(Lt. Eyre's *Journal*.)

council, either to take refuge in the Balla Hissar, or endeavour to force a way to Jellalabad, and there remain until the arrival of reinforcements from India, tidings of which arrived within two days of the massacre. But his arguments were not regarded, and new terms were concluded, by which the representatives of the Indian government engaged to abandon all their forts, surrender their guns, evacuate Afghanistan, restore the deposed Dost, and pay a ransom of £140,000 in return for the supplies necessary for the retreat. Hostages were demanded and given for the performance of these humiliating conditions; but Lawrence and Mackenzie were released. Akber Khan desired that the English ladies should be left behind, as security for the restoration of the female members of his family; but the married officers refused the advantageous offers made from head-quarters to induce them to consent, and "some (says Eyre) declared they would shoot their wives first." On the 6th of January, 1842, though deep snow already lay on the ground, the troops quitted the cantonments, in which they had sustained a two months' siege, to encounter the miseries of a winter march through a country of perhaps unparalleled difficulty, swarming with mountain tribes predatory by profession, and bitterly incensed against the foreign invaders. The records of that terrible journey are written in letters of blood. No circumstances could possibly have occurred under which regularity and discipline were more needed to ensure the safety of the retreating force; yet even the semblance of it was soon abandoned in one general attempt to keep on with the foremost rank: to lag behind was certain death from Afghan knives or Afghan snows. In the dark and terrible pass of Koord Cabool, five miles in length, through which a roaring torrent dashed on between blocks of ice, while its heights were crowned by the pitiless Khiljies, 3,000 persons perished. The Englishwomen rode through, on horseback or in camel-paniers, uninjured, except Lady Sale, who received a bullet in her arm; but, brave-hearted as they were, it

seemed scarcely possible they and their infant children could long continue to bear up against the intense cold and incessant fatigue.\* The only alternative was to accept the protection of Akber Khan, who, it is said, promised to convey them to Peshawur; and to him the whole of the married Englishwomen, their husbands, and children, with Lady Macnaghten and her widowed companions, were confided. It was a tempting opportunity for barbarian revenge. The wives and babes of the proud Feringhees were at the mercy of the Afghans; yet there is no record of any insult having been offered to them, or any attempt to separate them from their natural protectors, now defenceless as themselves. On the contrary, Akber Khan earnestly craved the forgiveness of Lady Macnaghten, assuring her he would give his right arm to undo what it had done; while, in many ways, he strove to alleviate the hardships of the march by bearing the weaker of the party over fords on his own steed, binding up the wounds of the officers with his own hands, and suffering the ladies to encumber the march with the costly baggage which two or three of them still retained. The voluntary surrender of such a prize was of course not to be expected while his father, brothers, and wives were retained in exile. As it was, his "guests," as they were termed, had every reason to rejoice at finding in temporary captivity an alternative for the loss of life. On the very next day (10th January), the remnant of the doomed force was intercepted on the road to Jellalabad, in a narrow gorge between the precipitous spurs of two hills, and the promiscuous mass of sepoy and camp followers were hewn down by the infuriated Afghans. Elphinstone sent to Akber Khan, who, with a body of horse, still hovered on the flanks of the retreating force, to entreat him to stop the massacre; but he replied, that it was impossible,—at such times the Khiljies were uncontrollable even by their immediate chiefs: there was but one chance for the English—an immediate and unconditional surrender of arms. The general sadly resumed his march to the Jugdulluck

\* Some of them had just become, or were about to become mothers. The widow of Capt. Trevor had seven children with her, and an eighth was born at Buddeabad. The idea of a grand military promenade was certainly carried out, when not only ladies and children, but a pack of foxhounds, and one of Broadwood's best pianos, were brought through the Bolan Pass.—(Fane's *Five Years*; Ex-political's *Dry*

*Leaves*.) The troops in Cabool, though in many respects needlessly encumbered, do not seem to have been attended by a single chaplain; an omission which tends to justify the description given by a Beloochee of the Feringhee force, of whom one sort (the Hindoos) were idolaters; the white (English) had no religion at all; but the third were good Mussulmen, "and say their prayers as we do."—(*Idem*.)



heights, and there the troops who remained—of ranks all but destroyed by death and desertion—found a brief respite, and strove to quench their burning thirst with handfuls of snow, and to still the cravings of hunger with the raw and reeking flesh of three newly-killed bullocks. The night was spent at Jugdulluck; on the following day Akber Khan requested a conference with the General, Brigadier Shelton, and Captain Johnson. It is strange, with the recollection of the Cabool plot fresh in their minds, that the three military authorities should have accepted this significant invitation; but they did so, were courteously received, refreshed with food, provided with a tent, and—made prisoners. They entreated their captor to save the survivors of the force, and he really appears to have exerted himself for that purpose, but in vain. Captain Johnson, who understood the Persian language, heard the petty chiefs of the country between Jugdulluck and Jellalabad declaiming, as they flocked in, against the hated Feringhees, and rejecting large sums as the price of a safe conduct to Jellalabad. On the evening of the 12th, the wreck of the army resumed its perilous march. The sepoys had almost wholly perished, and of the Europeans only 120 of the 44th regiment and twenty-five artillerymen remained; but their movements were still impeded by a comparatively large mass of camp followers, who “came huddling against the fighting men,” thus giving free scope to the long knives of the Afghans. The soldiers, after some time, freed themselves from the helpless rabble, turned against their foes with the bayonet, drove them off, and pursued their way to the fatal Jugdulluck Pass, where their sufferings and struggles found a melancholy termination. A barricade of boughs and bushes arrested further progress; officers, soldiers, and camp followers desperately strove to force a passage, though exposed to the deliberate aim of the “jezails” (long rifles) of the enemy. Anquetil, Thain, Nicholl, and the chief

of the remaining leaders fell here. About twenty officers and forty-five European soldiers cut their way through, hoping to gain Jellalabad; but weak and wounded, with only two rounds of ammunition left, they could not make head against the armed villagers who came crowding forth against them from every hut. The majority fell at Gundamuck; a few escaped and struggled onwards: but even they fell—one here, one there; until a single European (Dr. Brydon), wounded and worn out by famine and fatigue, mounted on a jaded pony, alone survived to announce to the gallant garrison of Jellalabad the total annihilation of the force of 16,500 men which had quitted Cabool only seven days before.\*

The terrible tidings reached Lord Auckland at Calcutta while awaiting the arrival of his successor in office. He had previously seen reason to regret bitterly that ever British troops had crossed the Indus: he knew that the E. I. Co. had consistently opposed the Afghan war, and that the Peel cabinet, now in power, were of the same opinion; and he therefore refused to follow up the abortive attempts already made for the relief of the beleaguered garrisons by any efficient measures, lest his proceedings should controvert the views and embarrass the projects of his expected successor. The arrival of Lord Ellenborough, at the close of February, released Lord Auckland from his painful position, and he quitted India in the following month, leaving on record a finance minute which proved the war to have already inflicted a burden of eight million on the Indian treasury. The only remaining circumstances which occurred under his sway, were the annexation of the little principality of Kurnoul† and of Cherong, a fortified place in Bundelcund.

ELLENBOROUGH ADMINISTRATION: 1842 to 1844.—The opinions held by the new governor-general were well known. His lordship had been for years president of the Board of Control: he was a conservative, and agreed with his party and the majority

\* A few straggling sepoys and camp followers afterwards found their way to Jellalabad.

† The Nawab (or nabob) of Kurnoul was suspected of entertaining hostile intentions against the English; the chief, though not very satisfactory evidence of which rests on his having accumulated a large quantity of warlike stores. He was likewise said to be a very oppressive ruler. At the close of the year 1848, the capital was seized by a British force without opposition, and the nabob, who had abandoned the place, was pursued, taken prisoner, and became a

dependent on the British government. He retired to Trichinopoly, and became a frequent attendant on the mission church. On the last occasion he was mortally stabbed by one of his Mohammedan followers. His eldest son, Uluf Khan, received a pension of £1,000 a-year until his death in 1848. The English enjoy the entire revenues of Kurnoul, estimated, in 1843, at £90,000 per annum, and control over a territory between 2,000 and 3,000 square miles in extent, with a population stated in a Parl. return for 1851, at 273,190.—(Thornton's *Gazetteer*.)

of unbiassed men, in considering the Afghan invasion "a blunder and a crime;" but he had likewise declared, that "India was won by the sword, and must be kept by the sword." These opinions, coupled with his adoption of an axiom of unquestionable truth, that "in war reputation is strength," served to convince the Indian public that his policy would probably aim at the complete and speedy evacuation of Afghanistan, performed in such a manner as to prove beyond question that England voluntarily resigned a position which an erroneous view of the feelings of the Afghans had induced her to assume; and this object, despite some glaring errors and inconsistencies, was, in the main, carried through by Lord Ellenborough. The first event in his administration was the surrender of Ghuznee, by Colonel Palmer, to Shums-oo-deen Khan, nephew to Dost Mohammed, on the 6th of March; the fear of a failure of water and provisions being the reasons alleged for the relinquishment of this strong fortress and the surrender of the officers,\* who were treated with faithless cruelty by the conqueror. Nott and Sale still held their ground at Candahar and Jellalabad, against bitter cold, scarcity of fuel and provisions, and repeated though unskilful assaults, as did also the little garrison of Kelat-i-Khilji, under Captain Craigie. At Jellalabad, repeated minor shocks of earthquake were succeeded on the 10th February by a terrible convulsion, which levelled with the ground the defences which had been erected and rendered efficient at the cost of three months' intense labour of mind and body. Akber Khan, with the flower of the Barukzye horse, was at hand, ready, it was expected, to enforce the fulfilment of Elphinstone's order of surrender. But "the illustrious garrison," as Lord Ellenborough justly styled the brave band, did not abate one jot of hope or courage. The spade and pickaxe were again taken in hand, and the work of restoration went forward so rapidly that Akber, deceived as to the extent of the damage sustained, declared that English witchcraft had preserved Jellalabad from the effects of the mighty shock. The Afghans, having little inclination for a hand-

\* Kaye says—"If there had been any one in Ghuznee acquainted with the use and practice of artillery, the garrison might have held out till April." He adds, "That among the officers of Nott's army [by whom the place was reoccupied in September], the loss of Ghuznee was considered even less creditable than the loss of Cabool."—(ii., 428-9.)

to-hand encounter with Sale's brigade, contented themselves with striving to maintain a rigid blockade; but the garrison sallied forth under Dennie, and swept away sheep and goats in the very front of the foe. The political agent, Capt. Macgregor, an able and energetic man, contrived to establish a system of intelligence far superior to that generally maintained by the English. Tidings arrived on the 5th of April, that General Pollock, with 12,000 men and supplies of all kinds, was fighting his way to their rescue through the Khyber Pass, opposed by Akber Khan. The garrison gallantly resolved to assist their countrymen by issuing forth to attack the Afghan camp. This unlooked-for enterprise was attended with complete success. The blockading troops were completely routed, and fled in the direction of Lughman. The victors lost only thirteen men; but that number included the gallant Colonel Dennie, who fell at the head of the centre column. On the 11th April, the army under General Pollock reached Jellalabad, and the garrison, whose five months' beleaguerment had been already so brilliantly terminated, sent the band of the 13th light infantry to meet the troops, and marched them in to the fort to the tune of an old Jacobite song of welcome, of which the refrain runs, "Oh! but ye've been lang o' coming." General England was not successful in his early attempts to succour Nott and his "noble sepoys"† at Candahar. Having been repulsed in an attack on the Kojuck Pass, he fell back upon Quetta, and commenced fortifying that town; but General Nott imperatively demanded his renewed advance, and sent the best part of his force to aid England through the pass, who thus assisted, marched to Candahar, which place he reached with little loss; for the Afghans, though strongly posted at Hykulzie (the scene of his former discomfiture), were rapidly dispersed by a vigorous attack, and did not muster in any force to oppose his further progress.

No impediment now remained to the junction of the forces under Nott and England with those of Pollock and Sale. The only consideration was, what to do with them. Lord Ellenborough had wisely re-

† "My sepoys," Nott writes to Pollock in April, "have behaved nobly, and have licked the Afghans in every affair, even when five times their number." In the same letter he states that they had had no pay since the previous December. The fidelity and privations of the native troops throughout the Afghan war well deserve a special narration.

solved on the evacuation of Afghanistan; but he left to the military authorities the choice of "retiring" by the line of Quetta and Sukkur, or by that of Ghuznee, Cabool, and Jellalabad. Nott chose the latter alternative; and in communicating his resolve, repeated with quiet sarcasm his lordship's phrase of "retiring" from Candahar to India by way of Ghuznee, Cabool, and Jellalabad; the said retirement, says Kaye, being like a man retiring from Reigate to London *via* Dover and Canterbury. Pollock entirely sympathised with General Nott. The former marched to Cabool, which he reached on the 5th Sept., after having encountered and put to flight the Afghans under Akber,\* in the valley of Tezeen and the adjacent passes of Koord Cabool, where the English had been slaughtered in the previous January. General Nott proceeded to Ghuznee, which was evacuated on his approach; and after destroying the town as well as citadel by fire, he proceeded to the tomb of Mahmood, in obedience to the special instructions of the governor-general, to bear away the famous idol-destroying mace of the conqueror, suspended above the tomb, and a pair of sandal-wood gates, embossed with brass, which were said to have been carried away by him from the temple of Somnauth, in Guzerat, A.D. 1024. Burdened with these trophies, the general proceeded to Cabool, which city Pollock had entered unopposed on the 15th Sept., and planted the union-jack on the Balla Hissar.†

In the interval between the evacuation and reoccupation of the capital of Afghanistan by the English, another melancholy tragedy had been enacted. Shah Soojah, abandoned by his allies, for some months contrived to maintain himself in the Balla Hissar; but his position becoming at length insupportable, he resolved to attempt to join Sale at Jellalabad. Early on the morning of the 5th of April, the Shah left the citadel, escorted by a small party of Hindoostanees, intending to review the troops

\* The Goorkalese infantry fought most manfully, clambering undauntedly the steepest ascents, beneath the iron rain poured on them from Afghan jezails. —(Kaye, ii., 579.) It must have been a strange sight to see these daring, sturdy, but diminutive men, driving before them their stalwart foes; but stranger still the thought, how recently these valuable auxiliaries had done battle on their native hills, against the people for whom they were now shedding their life-blood, and ably wielding the British bayonet.

† *Balla Hissar*, the Persian for High Fort.

‡ The trials of the captives began when Akber became again a fugitive, and could no longer retain

and quit Cabool; but his passage was opposed by a body of Afghans, who opened a volley upon the royal *cortège*, which struck down the bearers of the state chair, and killed the king himself. Throughout his whole career, Shah Soojah had been a pompous man, speaking and thinking ever of "our blessed self." Now his lifeless body was stripped of its costly array, of its sparkling head-dress, rich girdle, and jewelled dagger, and flung into a ditch. His eldest son, Prince Timur, then about twenty-three years of age, was with the British at Candahar. The next in succession, Futteh Jung, was courted by the Barukzye chiefs, who hoped to find in him a shield from the vengeance of the advancing foe. The prince listened with undisguised distrust to the protestations made to him by the Seyed deputies; and in reply to offers of allegiance, to be sworn on the Koran, caused several exemplars of the sacred volume to be placed before them, bearing the seals of the Barukzye, Dourani, Kuzzilbash, and Kohistanee chiefs, with oaths of allegiance to his murdered father inscribed on the margin. "If there be any other Koran sent from heaven," he said bitterly, "let the Barukzyes swear upon it: this has been tried too often, and found wanting." The ambassadors were dismissed; but Futteh Jung, unable to maintain his ground, soon fell into the hands of the chiefs he so avowedly mistrusted, and after being robbed of the treasure which his father had contrived to accumulate, made his escape, and joined General Pollock at Gundamuck on the 1st of September, with only two or three followers.

The next feature in the campaign was a joyful one—the recovery of the captives. The ladies and children were alive and well, but General Elphinstone had expired in the month of April, worn out by incessant bodily and mental pain. On learning the approach of Pollock, Akber‡ confided his unwilling guests to the care of one them under his immediate protection. About this time an accident occurred which placed them in jeopardy. A servant in attendance on the chief, wounded him in the arm by the accidental discharge of a musket. No difference took place in the conduct of Akber himself; and even when weak and wounded, he gave up his litter for the accommodation of the ladies on their removal from Budeeabad. His countrymen, more suspicious, attributed the disaster to English treachery; and had the young Barukzye died, the lives of all the male captives and hostages would probably have been sacrificed as an act of retribution. Ameen-oollah Khan, especially,

Saleh Mohammed, who was directed to deliver them to the charge of a neighbouring Usbeek chief, styled the Wali of Kooloom, who had proved a staunch friend to Dost Mohammed. Saleh Mohammed had formerly been a subahdar in the service of the E. I. Co., but being (by his own account) disgusted with the abusive language used towards natives by the European officers, he deserted with his company to the Dost. It was not a difficult matter to induce him to play the traitor over again, provided the risk were small and the temptation great. Tidings of the progress of the English army calmed his fears; and offers on behalf of government, backed by the written pledge of the captives to pay him 1,000 rupees a-month for life, and a present of 20,000 rupees, stimulated his hopes: from gaoler he turned confederate; and the soldiers (250 in number) were, by the promise of four months' pay as a gratuity, metamorphosed from guards to servants. Eldred Pottinger assumed the direction of affairs, levied contributions upon some merchants passing through Bamian, and hoisted an independent flag on the fort the party said that he knew a reward of a lac of rupees had been offered by Macnaghten for his life. Mohammed Shah Khan, and a "young whelp," his son, took advantage of the absence of Akber to pillage the captives, and is said to have obtained from Lady Macnaghten alone, shawls and jewels to the value of £20,000; but the jewels were soon voluntarily restored (Johnson and Eyre.) Considering that the daughter and sister of the plunderers (Akber's wife) had been carried into exile by the countrymen of Lady Macnaghten, there was nothing very extraordinary in their thus seeking means to carry on the war. Before the late crisis, the captives had enjoyed advantages very unusual for even state prisoners in Afghanistan. Five rooms in the fort of Budecabad, furnished by Mohammed Shah Khan for his own use, were vacated for their accommodation. During the three months spent here four European infants were born. The elder children passed the time in blindman's-buff and other games befitting their age; their parents in writing long letters to India and England, carrying on a great deal of cypher correspondence with Sale's garrison, and playing backgammon and drafts on boards of their own construction, and cards, by means of two or three old packs preserved among their baggage. From "a Bible and Prayer-book picked up on the field at Boothauk," the services of the established church were read every Sunday, sometimes in the open air; and this observance was, we are told, not lost on their guards, who, wild and savage as they were, seemed to respect the Christian's day of rest, "by evincing more decorum and courtesy than on the working-days of the week."—(Kaye ii., 489.) Who that really desires the spread of vital Christianity, can read this account without regretting that the captives of Budecabad had not been inspired with more of the devotional spirit which burned so

had entered as prisoners. To remain at Bamian was, however, deemed even more perilous than to attempt to join the army at Cabool; and on the 16th of September, the officers, ladies, and children set forth on their march. The next day Sir Richmond Shakespear, at the head of 600 Kuzzilbash horse, met the fugitives, who thus escorted, joyfully pursued their route, till, on the 20th, near Urghundeh, the column sent by Pollock to support Shakespear appeared in sight, and its veteran commander, Sir Robert Sale, came galloping on to embrace his wife and widowed daughter.\*

The objects of the campaign were fully accomplished: the beleaguered garrisons had been relieved, the captives rescued; the last of them (Captain Bygrave) being voluntarily released by Akber; and the orders of the governor-general were stringent for the return of the entire English force to Hindoostan without incurring any unnecessary peril. The various Afghan chiefs, whose blood-feuds and factious dissension had prevented any combined action, now earnestly deprecated the vengeance of the Feringhees. The hostages left at Cabool were restored, strong and clear in the bosoms of two other English captives, then dying by inches in filth and misery at Bokhara, but evincing such unmistakable indications of true piety, that sorrow for the suffering is lost in veneration for the enduring faith of Colonel Stoddart and Arthur Conolly. The former I deeply respected on the ground of personal knowledge; the latter I know only by the touching records made public since his execution. The history of both is yet fresh in the minds of the existing generation. Colonel Stoddart had gone in an official position to Bokhara, and was detained by the Amcer, who had been angered by some real or apparent slight shown him by the British authorities; Conolly sought to procure the release of Stoddart, but was condemned to share his imprisonment. The touching letters written at this period, and forwarded to India through the intervention of a faithful servant, still remain to attest the patience in adversity of these illustrious sufferers. Stoddart, in a moment of weakness, after being lowered down into a deep dark well, tenanted by vermin, was forced into making a profession of belief in the false prophet; but Conolly never wavered. On the 17th of June, 1842, the two friends were brought forth to die, clothed in the miserable rags which five months' incessant wear had left to cover their emaciated and literally worm-eaten frames. The elder captive was first beheaded, and an offer of life was made to his companion as the price of apostasy, but without effect. "Stoddart," he said, "became a Mussulman, and you killed him: I am prepared to die." The knife of the executioner did its work, and another name was added to the glorious army of martyrs—the true soldiers of the Cross.—(Kaye, Wolfe, &c.)

\* The widow of Lieutenant Sturt, of the engineers, a very active officer, who was mortally wounded by the Khiljies in the Koord Cabool Pass.

and bore testimony to the good treatment they had received from the nabob, Zemaun Shah. The "guests" of Akber Khan told the same tale; and Colonel Palmer and Mohun Lal\* were almost the only complainants;—the one having fallen into the hands of the instigator of the murder of Shah Soojah, the unworthy son of Nawab Zemaun Khan; the other having provoked personal vengeance by repeated offers of blood-money for the heads of the leading Barukzyes. The principal Cabool leaders proposed that a younger son of the late king's, named Shahpoor (the son of a Populzye lady of high rank), should be placed on the throne; and to this the British authorities consented. The object of the proposers was not accomplished; they hoped to turn away the vengeance of the invaders, but in vain. The military leaders pronounced that the destruction of the fortresses of Ghuznee, Jellalabad, Caudahar, Khelat-i-Khilji,† Ali-Musjid, and many others of inferior note,—the sacrifice of thousands of villagers armed and unarmed, the wanton destruction of the beautiful fruit-trees (which an Afghan loves as a Kaffir does cattle, or an Arab his steed), with other atrocities almost inseparable from the march of an "army of retribution," were all too trifling to convey a fitting impression of the wrath of the British nation at the defeat, disgrace, and ruin which had attended its abortive attempt at the military occupation of Afghanistan. It is idle to talk of the savage ferocity‡ of the Khiljies, as displayed in the horrible January massacre, since that very massacre had been wantonly provoked. The English originally entered those fatal passes as foes; they marched on,

\* Moonshee Mohun Lal was educated at the Delhi college, where the experiment of imparting secular education, without any religious leaven, was being tried by the British government. The same system is now in force throughout India. Mohun Lal was one of its first-fruits, and his cleverly-written work on Cabool is well worthy of the attention of all interested in tracing the effects of purely secular instruction. Shahamet Ali (author of the *Sikhs and Afghans*), the fellow-student of Mohun Lal, was a different character, and not a Hindoo, but a Mohammedan. His new acquirements were not, therefore, likely to have the effect of producing the same flippancy and scepticism which was almost sure to be occasioned by proving to such men as Mohun Lal, that modern Brahminism was the offspring of superstition and ignorance, without inculcating a knowledge of those doctrines which Christians hold to be the unerring rule of life, the only wisdom.

† Kaye, ii., 599. Khelat-i-Khilji, or "the Khilji Fort," situated between Candahar and Ghuznee, must not be confounded with the famous Khelat-i-Nuseer near the Bolan Pass, taken by Major-gen-

in the pride of conquerors, to rivet a rejected yoke on the neck of a free, though most turbulent nation: their discipline and union were at first irresistible; yet subsequently, strife and incapacity delivered them over into the hands of their self-made enemies. They had (to use an Orientalism) gone out to hunt deer, and roused tigers. What wonder that the incensed people, heated with recent wrongs, should crush with merciless grasp the foe in his hour of weakness, under whose iron heel they had been trampled on so recently. It was a base and cruel thing to slay the retreating legions; but have civilised nations—France and England, for instance—never done worse things in Africa or the Indies, and vindicated them on the plea of state necessity? The defeated invaders fell with weapons in their hands: they fought to the last—at a heavy disadvantage, it is true; but still they did fight; and the physical obstacles which facilitated their overthrow, surely could not make the difference between the combatants greater than that which has enabled nations acquainted with the use of cannon to reduce to slavery or deprive of their land less-informed people.

The English refused to surrender, and paid by death the penalty of defeat, which would, in all probability, have been inflicted by them in a similar case. The captives and hostages were, generally, remarkably well used; even the little children who fell into the power of the Khiljies were voluntarily restored to their parents.§

Yet now the military authorities, not content with the misery wrought and suffered in Afghanistan,|| gravely deliberated on the most

eral Willshire in November, 1839, and in the defence of which the Beloochee chief, Mehrab Khan, with hundreds of his vassals, perished. Several women were slain to prevent their falling into the hands of the enemy: others fled on foot with their infants.

‡ The author of one of the numerous *Narratives* of the war, relates an anecdote of an Afghan boy of six years old, being found by an English soldier striving to decapitate the corpse of a colour-sergeant who had fallen some time before when Pollock fought his way through the Khyber Pass. The soldier came behind the child, "coolly took him up on his bayonet, and threw him over the cliff." Lieut. Greenwood narrates this incident in "the war of retribution" as evidence of *Afghan* ferocity.—(176.)

§ The daughter of Captain Anderson, and the son of Captain Boyd, fell into the hands of the Afghans in the Boothauk Pass.

|| Lord Brougham sternly denounced the destruction of the "hundred gardens" of Cabool, by "our incendiary generals."

efficient mode of perpetuating in the minds of the Cabool chiefs the memory of deeds which all parties might have been glad to bury in oblivion. The peaceable inhabitants of the city had been induced to return and resume their occupations; and when they beheld the son of Shah Soojah on the throne, and the English in daily intercourse with the leading chiefs, and making avowed preparations for final departure, they might well think that the worst was over. But it was yet to come. General Pollock considered the death of the envoy still unavenged, and resolved on the total destruction of the Great Bazaar and the Mosque. These orders were executed, but with difficulty, owing to the massiveness of these magnificent buildings, which it was found impossible to destroy in any reasonable time without the use of gunpowder. As might have been expected, the victorious soldiery and licentious camp followers did not content themselves with fulfilling their destructive commission, but rushed into the streets of the city, applied the firebrand to the houses, and pillaged the shops; so that above four or five thousand people (including many Hindoos who had been enticed into the town by express promises of protection) were reduced to utter ruin. The excesses committed during the last three days of British supremacy in Cabool, were far more disgraceful to the character of England, as a Christian nation, than the expulsion and extermination of the ill-fated troops to her military reputation.

Popular feeling, both in India and in England, was strongly expressed against the needless injury done to the Afghans by the razing of the Great Bazaar, and especially against the extensive destruction of trees, by order of the commander-in-chief, by deeply ringing the bark, and leaving them to perish. Lord Ellenborough appears to have regretted these outrages; but this and all other drawbacks were for the time forgotten in the grand display with which he prepared to welcome the returning army. The homeward march commenced on the 12th of October, and proved singularly peaceful and uneventful. The old blind king, Zemaun Shah, with his nephew Futteh Jung, and the chief part of the family of the late Shah Soojah, accom-

panied the troops. The gates of Somnauth were not forgotten; and the governor-general gave vent to his delight at their attainment in a proclamation, in which he declared the insult of 800 years to be at length avenged, and desired his "brothers and friends," the princes and chiefs of Sirhiud, Rajwarra, Malwa, and Guzerat, to convey the "glorious trophy of successful war" with all honour through their respective territories, to the restored idolatrous temple of Somnauth.

For this strange "song of triumph," as the Duke of Wellington styled the effusion, Lord Ellenborough may perhaps be excused, in remembrance of the honest and manly recantation of error which he published on behalf of the Indian government on the 1st of October, 1842, when directing the complete evacuation of Afghanistan,—this announcement being made from Simla precisely four years after the famous warlike manifesto of Lord Auekland. The whole of the Afghan captives were released. Dost Mohammed returned to Cabool to take possession of the throne vacated by the flight of Shahpoor immediately after the departure of the British force; Akber joyfully welcomed home his father and family; the Persians again besieged Herat; and all things returned to much the same position they occupied before thousands of lives (including that of the forsaken Shah) and about fifteen million of money had been wasted, in an abortive attempt at unauthorised interference. The only change effected was, that instead of respect and admiration, the Afghans (generally, though perhaps not justly, considered an unforgiving race) learned to entertain towards their powerful neighbours emotions of fear and aversion, excited by the galling memories inseparably connected with the march of a desolating army, whose traces were left everywhere, "from Candahar to Cabool, from Cabool to Peshawur."\*

The annexation of Sinde—the next event in Anglo-Indian history—has been termed by its chief promoter "the tail of the Afghan storm." Such is the light in which Sir Charles Napier avowedly desires to place it; and his brother, General William Napier, in his account of the *Conquest of Sinde*, plainly declares the open encroachment on the in-

\* Kaye, ii., 669. Among other authorities examined, in writing the above sketch of the Afghan war, may be named Eyre's *Cabool*, Havelock's *Narrative*, Dennie's *Campaigns*, Outram's *Rough Notes*,

Hough's *British at Cabool*, Fane's *Five Years in India*, Osborne's *Court of Runjeet Sing*, Taylor's *Scenes*, Nash's *Afghanistan*, Barr's *Cabool*, Burnes' *Cabool*, Allen's *Diary*, Thornton's *India*.

dependence of the Ameers, made by order of Lord Auckland, to have been a measure of which "it is impossible to mistake or to deny the injustice." Major (now Col.) Outram, the political Resident at Hyderabad, to some extent defends the proceedings which, though occasionally under protest, he was instrumental in carrying through; and brings forward a considerable body of evidence to prove that Sir Charles Napier, when vested with complete military and diplomatic authority in Sinde, while denouncing the unauthorised aggression committed by Lord Auckland, used the despotic power vested in him by Lord Ellenborough to sap the resources of the Ameers, and then drive them to desperation; the results being their ruin, the annexation to British India of a fertile and valuable boundary province, and the gain to the invading army of prize-money to an enormous extent—the share of Sir C. Napier (an eighth) amounting, it is asserted, to £70,000. Taken together, the admissions and accusations respectively made and preferred by the two leading authorities, can scarcely fail to leave on the mind of the unprejudiced reader a conviction that the Ameers were very illused men, especially the eldest and most influential of them, the venerable Meer Roostum. They were usurpers; but their usurpation was of above sixty years' standing: and the declaration of Lord Ellenborough is not equally correct, that what they had won by the sword they had lost by the sword; inasmuch as their earliest and most important concessions were obtained amid "a sickening declamation about friendship, justice, and love of peace;" which declamation was continued up to the moment when Meer Roostum, bending under the weight of eighty-five years, and his aged wife (the mother of his eldest son) were driven forth into the desert, not by English bayonets, but by English diplomacy.

Such at least is the account given by Napier of the opening negotiations with Sinde, and by Outram of their abrupt termination. To enter into the various points of dispute would be manifestly incompatible with the brief sketch of the leading features attending our occupation of the country, alone consistent with the objects and limits of the present work: even that sketch, to economise space, must be given in small type.

In the beginning of the 18th century, the Kalloras, military fanatics from Persia, became dominant in Sinde, and though compelled to pay tribute

to the Dourani conqueror of Afghanistan, retained their position as rulers until about 1771, when a conflict arose between them and the chiefs of the Beloochee tribe of Talpoors, who had come from the hills to settle in the fertile plains. After some years' fighting the Talpoors became undisputed masters of Sinde. Their head, Meer Futteh Ali, assigned portions of the conquered territory to two of his relations, and thus gave rise to the separate states of Khyrpoor and Meerpoor. The remaining part of Sinde, including the capital Hyderabad, he ruled until his death, in amicable conjunction with his three brothers. The Talpoors, like their predecessors the Kalloras, evidently dreaded the encroaching spirit of the powerful Feringhees, and quietly but firmly opposed their early attempts at commercial intercourse. At length, in 1832, the pertinacious resolve of the English to open up the navigation of the Indus, prevailed over their prudent reserve, and a new treaty was formed through the intervention of Colonel (now Sir Henry) Pottinger, by the fifth article of which the contracting parties solemnly pledged themselves "never to look with the eye of covetousness on the possessions of each other." The very words betrayed the apprehensions of the Ameers; and that these were shared by their subjects is proved by the exclamation recorded by Burnes, as uttered in the previous year by the witnesses of his approach—"Alas! Sinde is gone since the English have seen our river!"

The prediction was soon verified. In 1836, the ambitious designs of Runjeet Sing gave the Anglo-Indian government an opportunity of interference, which was availed of by the proffer of British mediation. At this time the original Talpoor rulers were all dead, and their sons reigned in their stead. Noor Mohammed wore the puggree or turban of superiority, and was the acknowledged rais or chief at Hyderabad; Sheer Mohammed at Meerpoor, and Meer Roostum at Khyrpoor, in Upper Sinde. Meer Roostum was eighty years of age, and was assisted in the government by his numerous brothers. He was, however, still possessed of much energy; and so far from fearing the hostility of Runjeet Sing, or desiring the dangerous aid of the English, he exclaimed confidently—"We have vanquished the Seik, and we will do so again." It was, however, quite another thing to compete with the united forces of Runjeet Sing and the English; and the intimate connexion so unnecessarily formed between these powers in 1838, proved pretty clearly that the choice lay between mediation or open hostility. The Ameers chose the former, and consented to the permanent residence at Hyderabad of a British political agent, with an armed escort. Two months after the conclusion of this arrangement, the Tripartite Treaty was signed at Lahore, and involved a new question as to the route to be taken for the invasion of Afghanistan. Runjeet Sing, stimulated by his distrustful durbar or court, would not suffer his sworn allies to march through the Punjab. Advantage was therefore taken of the weakness of the Ameers to compel them to sanction the passage of the British troops; and the island-fortress of Bukkur was obtained from Meer Roostum, to be held "during the continuance of the war." These concessions paved the way for fresh exactions, and the Ameers were next required to contribute towards the expenses of the expedition. The demand was first urged on the plea of arrears of tribute claimed by Shah Soojah as their suzerain, but this was refuted by

the production of a formal release made by the Shah of all claims upon Sindé or Shikarpoor. The next pretext for oppression was, that the Ameers had tendered professions of submission to Persia, the evidence being a document of doubtful authenticity, ostensibly addressed by Noor Mohammed to the Persian monarch, and which, when freed from Oriental hyperbole, contained little more than expressions of unbounded respect for the Shah of Persia as the head of the Sheiah sect of Mohammedans. It was so improbable that the Ameers would comply with the present demands, except under the sternest compulsion, that preparations were made to punish their refusal by the storming of Hyderabad, and the army of the Indus turned out of its way for the express purpose, and menaced Sindé at four different points. Sir John Keane designated the anticipated siege of the capital, "a pretty piece of practice for the army;" and the officers generally indulged in sanguine expectations of pillage and prize-money. The Ameers were divided in opinion; and one of them proposed that they should defend themselves to the last, and then slay their wives and children, and perish sword in hand—the terrible resolve carried out not many months later by Mehrab Khan, of Khelat-i-Nuseer. More temperate counsels prevailed. Meer Roostum confessed that in surrendering Bukkur he had given the heart of his country into the hands of the foe; and the Ameers, with utter ruin staring them in the face, consented to the hard terms imposed by the treaty signed in February, 1839, which bound them to receive a subsidiary force, and contribute three lacs (afterwards increased to three and a-half) for its support, to abolish all tolls on the Indus, and provide store-room at Kurrachee for military supplies. In return, the Anglo-Indian government promised not to meddle with the internal affairs of the Ameers, or *listen to the complaints of their subjects* (a very ominous proviso.) These concessions, together with a contribution of £200,000, half of which was paid immediately, did not satisfy Lord Auckland. Kurrachee had been taken possession of during the war; and he now insisted on its permanent retention, despite the promises made by his representatives.

The Ameers had no alternative but to submit: yet, says General Napier, "the grace with which they resigned themselves to their wrongs, did not save them from the cruel mockery of being asked by Colonel (Sir H.) Pottinger, 'if they had the slightest cause to question the British faith during the last six months?' and the further mortification of being told, 'that henceforth they must consider Sindé to be as it was in reality a portion of Hindoostan, in which the British were paramount, and entitled to act as they considered best and fittest for the general good of the whole empire.'"

Colonel Pottinger, created a baronet, continued Resident in Sindé until the beginning of 1840. He was succeeded by Major Outram, who, by the death of his coadjutor, Mr. Ross Bell, became political agent for the whole of Sindé and Beloochistan. Major Outram found the Ameers in precisely the state of feeling which might have been expected;—deeply irritated against the English, disposed to rejoice at any misfortune which might overtake them, and ready to rise up and assert their independence if the opportunity offered; but constantly let and hindered by the fear of consequences, and by the divided counsels arising from separate interests. With anxious care the Resident watched their feel-

ings and opinions—warning one, counselling another, reasoning with a third; and in the perilous moment when General England fell back on Quetta, after a vain attempt to succour Nott at Candahar, Outram strained every nerve to prevent the rulers of Sindé from making common cause with their Beloochee countrymen against the invading army. "Even their negative hostility," he writes, "evinced by withholding supplies, would have placed us in a position which it is fearful even to contemplate." The recollection of past wrongs did not, however, prevent the majority of the Ameers from actively befriending the troops in their hour of need; but some of them were suspected of being concerned in hostile intrigues; and though Meer Roostum behaved with accustomed candour, his minister, Futteh Mohammed Ghoree became implicated in certain suspicious proceedings. Towards the conclusion of the Afghan war, Major Outram proposed to Lord Ellenborough (the successor of Lord Auckland) a revision of the existing treaties, which were very vaguely worded, urging that precautions should be taken against the possible machinations of such of the Ameers as had betrayed hostile intentions during the late crisis, and advised that Shikarpoor and its dependencies, with Sukkur and the adjacent fortress of Bukkur, should be demanded in complete cession, in return for the relinquishment of the yearly tribute of £350,000, and of arrears due of considerable amount.

Lord Ellenborough was not content with this arrangement: he desired to reward the good service done to the forces in the late war by a neighbouring prince, the Khan of Bhawalpoor,\* by the restoration of certain territories captured from him some thirty years before by the Ameers, who were considered to have rendered themselves "most amenable to punishment." To this Major Outram assented; but when his lordship proceeded to write denunciatory letters to the Ameers, threatening them with punishment for past offences, should any such be clearly proved, the Resident withheld these communications, believing that their delivery would gravely imperil the safety of the troops still scattered in isolated positions in dreary Afghanistan. The governor-general admitted the discretion of this procedure; but he had taken up, with the energy of a strong though often prejudiced mind, the popular notion of the day against political agents; and the prudence displayed by Colonel Outram did not exempt him from the sweeping measures enacted for the supersession of political by purely military functionaries.

Sir Charles Napier had just arrived in India, and to him was entrusted the task of gaining the consent of the Ameers to concessions amounting to their virtual deposition.† The sudden recall of the Resident, and the arrival of a military leader, at the head of a powerful force, alarmed the Ameers, and they strove to deprecate the impending storm by every means in their power. The testimonies of many British officers and surgeons are brought forward by Major Outram, to confirm his own evidence with regard to the characters of the unfortunate chiefs of Sindé, whom he describes as decidedly favourable specimens of Mohammedan princes, ruling after a very patriarchal fashion,—merciful, accessible to complainants, singularly temperate, abstaining not only from drinking and smoking, but likewise rigidly eschewing the accursed drug, opium, even as a medicine.‡ The

\* Vide Shahmet Ali's *History of Bahawalpoor*.

† Thornton's *India*, vi., 423.

‡ Outram's *Commentary*, 529. Dr. Burnes' *Sindé*.



mere fact of so many chiefs living and bearing sway in the domestic fashion described by Pottinger, Burnes, and Outram, was a strong argument in their favour; yet Sir Charles Napier unhappily lent a credulous ear to the mischievous rumours which a longer residence in India would have taught him to sift narrowly, or reject wholly: and his entire conduct was in accordance with his undisguised opinion, that the Ameers were "thorough ruffians" and "villains," drunken, debauched, capable of fratricide, "any one of them," and determined to assassinate him and "Cabool" the troops. Accustomed to the courtesy of British officials (one of whom had stood unshod in their presence, some ten years before, to crave permission to open the navigation of the Indus), they were now startled by the tone of contemptuous distrust with which they were treated by the dark-visaged little old man, who, despite his unquestioned courage in the field of battle, avowedly suffered personal fear of treachery to prevent his according a friendly hearing to the "benign and grey-headed monarch who had conferred the most substantial benefits on the English nation."

Major Outram states that Sir Charles Napier scrupled not to add exactions to the treaties not desired by Lord Ellenborough: and further, that he incited the most ambitious and able of the Khyrpoor brothers (Ali Morad), to intrigue against their venerated rais or chief, Meer Roostum, who, perceiving the offensive and threatening attitude assumed by the British forces, asked the advice of the general what to do to preserve peace, and offered to take up his residence in the camp. Sir Charles Napier advised, or rather commanded him to join his brother. The aged rais complied, and the result was his being first, as Sir Charles said, "bullied" into resigning the puggree to Ali Morad, and then induced, by artfully-implanted fears of English treachery, to seek refuge with his family in the wilderness. This step was treated as an act of hostility, and immediate preparations were made for what was vauntingly termed "the conquest," but which was expected to be little more than the occupation of Sinde. The customary form of a declaration of war was passed over; and it being suspected that the fugitives had taken refuge in Emaunghur, Sir Charles marched, with 400 men mounted on camels, against that fortress in January, 1843. Emaunghur belonged to a younger brother of Roostum—Mohammed of Khyrpoor, one of the reigning Ameers, who had never "been even accused of a single hostile or unfriendly act,"\* but who had the unfortunate reputation of possessing treasure to the amount of from £200,000 to £360,000, stored up in Emaunghur.† No such prize awaited the general; he found the fort without a living inhabitant, but well supplied with grain, of which the troops took possession, razed the walls, and marched back again.

At this crisis, Major Outram returned to Sinde, at the especial request of both Lord Ellenborough and Sir Charles Napier, to aid as commissioner in settling the pending arrangements. Having vainly entreated the general not to persist in driving the whole of the Ameers of Upper Sinde to open war, by compelling them to take part with Meer Roostum and his fugitive adherents, Major Outram centred his last efforts for peace in striving to persuade the Ameers

not yet compromised by any manifestation of distrust, to throw themselves at the feet of the English, by signing the required treaty. The task is best described in the words of the negotiator:—"I was called upon to obtain their assent to demands against which I had solemnly protested as a positive robbery: and I had to warn them against resistance to our requisitions, as a measure that would bring down upon them utter and merited destruction; while I firmly believed that every life lost, in consequence of our aggressions, would be chargeable on us as a murder."‡

The arguments of Major Outram succeeded in procuring the signature of the chiefs of Lower Sinde; but the prohibition he had received against any promise of protection for Meer Roostum, however clearly his innocence might be proved, excited uncontrollable indignation on the part of the Beloochee feudatory chiefs; and but for the efforts of the Ameers, the commissioner and his party would have been massacred on their return to the Residency. Major Outram was warned to quit Hyderabad. The vakeels or ambassadors dispatched to the British camp to offer entire submission, failed to procure even a hearing; and they sent word to their masters—"The general is bent on war—so get ready." In fact, Napier had been so long preparing to meet a conspiracy on the part of the Ameers, that he seems to have been determined either to make or find one, if only to illustrate his favourite denunciation of—"Woe attend those who conspire against the powerful arms of the company: behold the fate of Tippoo Sultan and the peishwa, and the Emperor of China!" Therefore he continued his march; and the terrified Ameers, on learning their last and deepest humiliations had been endured in vain, gave the rein to the long-restrained fury of their followers,—just fifty-three days after the commencement of hostilities by General Napier. On the 15th of February, a horde of armed Beloochees attacked the residence of the British commissioner. After a few hours' resistance, Major Outram and his escort evacuated the place, and retreated in marching order to meet the advancing army, which continued its progress to a village called Meanec (six miles from Hyderabad), which he reached on the 17th. Here the Ameers had taken up their position, with a force stated by Sir C. Napier at 25,862 Beloochees, hastily assembled and ill-disciplined; but than whom, he says, "braver barbarians never gave themselves to slaughter." And very terrible the slaughter was; for, if General W. Napier may be trusted, the Ameers "were broken like potsherds," and 6,000 men "went down before the bayonets of his (brother's) gallant soldiers, wallowing in blood." The English lost 264 killed and wounded.

Immediately after the battle, Meer Roostum and two others of the Khyrpoor family, with three of the Ameers of Hyderabad, influenced by the representations of Major Outram, abandoned all intention of defending Hyderabad, and delivered themselves up as prisoners; and on 20th of Feb., Napier entered the capital as a conqueror. Although there had been no declaration of war, and no sign of defence,—not a shot fired from the walls,—the prize-agents immediately set about the plunder of the city, in a manner happily unparalleled in the records of Anglo-Indian campaigns. The ladies of the imprisoned Ameers were exposed to the insulting search of one of the most abandoned of their own sex, the concubine of an officer on duty in Sinde. Everything belonging to them, even to the cots on which they slept, were seized and sold by public auction;§ and several of

\* Outram's *Commentary*, 39. † First Sinde *B. B.*, 469.

‡ Outram deemed himself "bound to vindicate his (Napier's) conduct in my communications with his victims."—(*Commentary*, 325.)

§ *Idem*, 439.

these unfortunates, driven to desperation, fled from the city barefoot, overwhelmed with shame and terror.

On the 24th of March, the army marched from Hyderabad against Sheer Mohammed, Ameer of Meerpoor, with whom a pitched battle took place near that city, in which the British were victorious, but lost 267 men in killed and wounded. Meerpoor was occupied without resistance, and the desert fortress of Amercot (the birthplace of Akber, conquered by the Ameers from the Rajpoots) surrendered at the first summons. The brothers Shah Mohammed and Sheer Mohammed were defeated in the month of June, by detachments respectively commanded by captains Roberts and Jacob; and the success of these officers in preventing the junction of the brothers, and defeating them, materially conduced to the triumphant conclusion of the campaign; for had their forces been able to unite and retire to the desert, and there wait their opportunity, heat, pestilence, and inundation (in a land intersected by canals), would have been fearful auxiliaries to the warfare of predatory hands, against an army already reduced to 2,000 effective men, who could only move in the night, and were falling so fast beneath climatorial influences, that before the intelligence of Captain Jacob's victory, orders had been issued for the return of all the Europeans to head-quarters.

The Ameers were sent as prisoners to Hindoostan, and stipends were eventually granted for their support, amounting in the aggregate to £46,614. Ali Morad was rewarded for his share in sending his aged brother to die in exile, by an addition of territory, which was soon afterwards taken away from him, on a charge of forgery urged against him, and it was thought clearly proved, by a vengeful minister. The rest of the province was annexed to British India, and divided into three collectorates—Shikarpoor, Hyderabad and Kurrachee. There is some consolation in being able to close this painful episode, by stating that the latest accounts represent the country as improving in salubrity, the inhabitants (considerably above a million in number) as tranquil and industrious, canals as being reopened, waste land redeemed, new villages springing up, and even the very mild form of slavery which prevailed under the Ameers, as wholly abolished. This is well; for since we are incontestably usurpers in Sind, it is the more needful we be not oppressors also.\*

The sword had scarcely been sheathed in Sind before it was again drawn in warfare against the Mahratta principality formed by Mahadajee Sindia. The successor of Dowlut Rao, and the adopted son of Baiza Bye, died childless in 1843. His nearest relative, a boy of eight years of age, was proclaimed Maharajah, with the sanction of the British government; and the regency was nominally entrusted to the widow of the late prince, a wayward and passionate, but clever and sensitive girl of twelve years of age. Great disorders arose in the state; and the turbulence of the mass of 40,000 soldiers, concentrated at Gwalior, rendered them an object of anxiety to the government.

\* *Vide Napier's Sind; and Outram's Commentary.*

Lord Wellesley—of the rights and obligations of the British government, as the paramount power in India—was urged by Lord Ellenborough as the basis of his proposed movements with regard to Gwalior. An army was assembled at the close of 1843; and while one division, comprising about eight or nine thousand men, marched from Bundeelund, and crossed the Sind river at Chandpoor, the main body, about 14,000 strong, under the command of Sir Hugh Gough, accompanied by the governor-general, crossed the Chumbul near the town of Dholpoor, and on the 26th of December encamped at Hingona, twenty-three miles north-west of the fort of Gwalior. Marching thence on the 29th, the British force came in front of a Mahratta host, about 18,000 in number, encamped fifteen miles from Gwalior, near the villages of Maharajpoor and Chonda. The details of the ensuing engagement are unsatisfactorily recorded. That the British came unexpectedly on the enemy, is proved by the fact that Lord Ellenborough (not a military man, as he sorrowfully said) was on the field, and also the ladies of the family of the commander-in-chief. The conflict was desperate, and the English suffered severe loss from the numerous and well-served artillery of the foe; but they prevailed, as usual, by sheer hard fighting, marching up under a murderous fire to the mouths of the cannon, bayoneting the gunners, and driving all before them. Flinging away their matchlocks, the Mahrattas fell back on Maharajpoor, where they held their ground, sword in hand, until General Valiant, at the head of a cavalry brigade, charged the village in the rear, and dispersed the foe with much slaughter. The survivors retreated to Gwalior, leaving on the field fifty-six pieces of artillery, and all their ammunition waggons. The total loss of British troops was 106 killed and 684 wounded. On the same day, Major-general Grey encountered 12,000 Mahrattas at Puniar, twelve miles south-west of Gwalior, captured all their artillery, and slew a large number of them, his own loss being twenty-five killed and 189 wounded. The victorious forces met beneath the walls of the ancient stronghold, which, on the 4th of January, 1844, was taken possession of by the contingent force commanded by British officers. At the base of the temple stood the Lashkar, or stationary camp, where about 5,000 Mahrattas, being amply

supplied with artillery, held out until the offer of liquidation of arrears, and three months' additional pay, induced them to surrender their arms and ammunition, and disperse quietly.

The native durbar attempted no further opposition to the views of the governor-general, and a treaty was concluded on the 13th Jan., 1844, by which the Maharanee was handsomely pensioned, but excluded from the government; and the administration vested in a council of regency, under the control of the British Resident, during the minority of the Maharajah. The fortress of Gwalior was ceded in perpetuity, and the sum of twenty-six lacs, or an equivalent in land, was demanded by Lord Ellenborough, in payment of long-standing claims; the subsidiary force was increased, and the maximum of the native army fixed at 9,000 men, of whom not more than one-third were to be infantry. The good conduct of the young rajah led to his being permitted to assume the reins of power before the expiration of the stated interval, and at its close, in 1853, he was formally seated on the musnud, and confirmed in the authority he had previously exercised on sufferance.\*

The hostilities carried on with China, however important in themselves, have no place in the already overcrowded history of India; but it would be unjust to Lord Ellenborough, to omit noticing his vigorous and successful exertions for the dispatch of troops and stores to the seat of war. The reasons for his recall by the E. I. Directory in July, 1844, were not made public; and it would be superfluous to speculate upon them in a work the object of which is to state facts, not opinions.

**HARDINGE ADMINISTRATION: 1844 TO 1848.**—Lord Ellenborough's successor, Sir Henry Hardinge, employed the brief interval of tranquillity enjoyed by the Anglo-Indian government in promoting public works, in

\* Churut Sing founded the fortunes of his family by establishing a sirdaree or governorship, which his son, Maha Sing, consolidated by the capture of the fort and town of Ramnuggur, from a strong Mohammedan tribe called Chettas. Maha Sing died in 1780, leaving one son, a child then four years old, the afterwards famous Runjeet Sing. The mother and mother-in-law of the young chief ruled in his name until the year 1793, when Runjeet became impatient of control, and sanctioned, or (according to Major Smyth) himself committed the murder of his mother, on the plea of her shameless immorality—a procedure in which he closely imitated the conduct of his father, likewise a matricide. The conquest of Lahore, in 1798, from some Seik chiefs by whom it was conjointly governed, was the first step of the

improving the discipline of the army, ameliorating the condition of the native troops, and endeavouring to produce a more friendly spirit between the military and civil services.

The progress of much-needed reforms was soon arrested by the outbreak of war on the north-western frontier, which was met by the governor-general in a firm and decisive spirit. Upon the death of the old Lion of the Punjab—the mighty robber-chief who had raised himself from the leadership of a small Jat tribe to the rank of Maharajah of the Seiks,—the kingdom he had founded was shaken to its base by a series of durbar intrigues and midnight assassinations, exceeding in atrocity the worst crimes committed at the worst periods of Hindoo or Mohammedan history. Kurruck Sing, the successor, and, it was generally believed, the only son of the deceased ruler, was deprived, first of reason and then of life, by the hateful machinations of the minister Rajah Dehra Sing and his profligate and abandoned son Heera (the pampered minion of Runjeet), the leading members of a powerful family, generally known as the Lords of Jummo, a principality conquered from the Rajpoots.† The incrimination of Kurruck Sing was scarcely ended, when some loose bricks fell on the head of his son No Nehal Sing, who was placed in a litter and carried off by the arch plotter Dehra, before the extent of the injury could be ascertained by the bystanders, and kept from the presence of his family until the crime had been completed, and the young rajah was a corpse. Murder followed murder: men and women, the guilty and the innocent, the vizier in the council-chamber, the general at the head of the army, the lady at her toilette, the babe in its cradle, were by turns the victims of unscrupulous ambition, covetousness of wealth, lust, cowardice, or vengeance. Dehra and ladder by which Runjeet mounted to power. Moul-tan and Peshawur were captured in 1818; Cashmere in the following year; and Runjeet's career of plunder and subjugation ceased not until a wall of impenetrable mountains closed its extension northward, in a manner scarcely less decisive than the check to his progress southward and eastward, previously given by the English, when their prudent interference compelled him to find in the Sutleja barrier as impassable as the Himalayas themselves.—(Prinsep's *Seiks*; Smyth's *Reigning Family of Lahore*; Shahamet Ali's *Seiks and Afghans*; Hügel's *Travels in Cashmere and the Punjab*.)

† The almost independent power which Runjeet Sing suffered the Lords of Jummo and other favourite chiefs to assume, was one of the causes of the fierce civil war for which his death gave the signal.

Heera Sing fell, each at a different crisis, while holding the office of vizier. Sheer Sing, the son of one of Runjeet's wives, obtained for a time the throne; but was murdered in 1843, after which a state of wide-spread anarchy prevailed throughout the Punjab, the chief remaining semblance of authority being vested in the person of Raneé Chunda, a concubine of the late Runjeet Sing, and the mother of a boy named Duleep Sing, who, though notoriously not the son of the Maharajah, had been in some sort treated by him as such. Dehra Sing, wanting a puppet, had drawn this child from obscurity; and his mother, under the title of regent, became the head of a faction, the opposers of which took their stand by declaiming truly against the spurious origin of Duleep Sing, and the shameless immorality of Raneé Chunda; and untruly, with regard to her alleged efforts to intrigue with the English against the independence of the Seik nation. Now, in fact, the only point upon which the various Seik parties had ever shown any degree of unanimity, was that of enmity to the British; and much evidence has gradually been brought to light of the actual treachery, as well as passive breach of treaty committed by them during the Afghan war. The intemperate language of Sir Charles Napier in Sindé, and his undisguised anticipation of war in the Punjab, had been published, doubtless with exaggeration, throughout that kingdom; and the general feeling of the Seiks was anxiety to assume an offensive position, and meet, if not anticipate, the expected invasion. The French officers in the Seik service (Ventura and M. Court), appear to have borne little part in the past commotions; but their exertions, together with those of Allard and the Neapolitan Avitabile, on whom Runjeet conferred the government of Pesbawur, had been sedulously and successfully employed in casting cannon, organising artillery, and disciplining troops after the European fashion.

The preparations made at Lahore for the passage of the Sutlej by a Seik army, could not long be concealed from the governor-general, who, with all practicable expedition and secrecy, concentrated 32,000 men and sixty-eight guns in and about Ferozepoor, Loodiana, and Umballa. Towards the middle of December, the Seiks crossed their boundary, bringing with them large quantities of heavy artillery; and one body of 25,000 regulars and eighty-eight guns, took up a

position near the village of Ferozshah; whilst another force of 23,000 men and sixty-seven guns, encamped opposite Ferozepoor. Both divisions commenced throwing up earthworks around their camps, and preparing for a vigorous contest.

The governor-general had hastened to the frontier to superintend the necessary preparations at the various cantonments. On learning the passage of the Sutlej by the Seiks, in direct contravention of existing treaties, he issued a declaration of war, and, in conjunction with the commander-in-chief, Sir Hugh Gough, advanced with the main column from Bussean (the military depôt) towards Ferozepoor. On reaching the village of Moodkee (18th December, 1845), tidings were received of a hostile encampment some three miles off, comprising a large body of troops, chiefly cavalry, supported by twenty-two guns. It was mid-day, and the English were weary with marching; nevertheless they started forward, after a brief interval for refreshment. The Seik artillery being advantageously posted behind some low jungle, fired briskly upon the advancing columns, but could not hinder the approach of the British horse artillery and light field batteries, which opened on them with steady precision, and caused a degree of confusion in their ranks, soon utterly broken by a sweeping charge of cavalry, closely followed by a continuous discharge from the muskets of the infantry. The Seiks were driven off by the bayonet whenever they attempted to make a stand, and fled leaving seventeen guns and large numbers of their dead comrades on the field. The slaughter would have been greater but for the weariness of the victors and the gathering darkness. The British returned to their camp at midnight, with the loss of 216 killed and 648 wounded, out of a force of 1,200 rank and file. Among the slain was Sir Robert Sale, who fell with his left thigh shattered by grapeshot. The victory was followed up by an attack on the intrenched camp of the enemy at Ferozshah. The Seiks were estimated at 35,000 rank and file, and eighty-eight guns; while the British numbered less than 18,000 men, and sixty-five guns. The disparity was sensibly felt, for the Seiks had proved themselves far more formidable opponents than had been expected; and their artillery (thanks to the labours of Ventura, Allard, Avitabile, and Court, and to the policy of encouraging foreign adventurers to enter

the service of native princes, and prohibiting Englishmen from a similar proceeding) excelled ours in calibre as much as in number, was in admirable order, and thoroughly well served. The British advanced from Mood-kee, and reached the hostile encampment about eleven o'clock on the 21st of December. The engagement commenced with an attack by the artillery on the Seik lines, which extended nearly a mile in length and half a mile in breadth. An order was given to the infantry to seize the enemy's guns; and the terrible task was effected with so much success, that the battle seemed almost gained, when the sudden fall of night obliged the combatants to cease fighting, because they could no longer distinguish friend from foe. The main body of the British forces was withdrawn a few hundred yards, and while resting under arms, some of the Seik guns which had not been taken possession of, were brought to bear on the recumbent troops. The governor-general mounted his horse and led the gallant 80th, with a portion of the 1st Bengal Europeans, against the hostile guns, carried them at a charge, caused them to be spiked, and returned to his previous station. The remainder of the night was one of extreme anxiety to the British commanders: their loss had been most severe; and the reserve force, under Sir Harry Smith, had been compelled to retire; while reinforcements were believed to be on their way to join the Seiks. The "mettle" of the troops and of their dauntless leaders was never more conspicuous: at daybreak they renewed the attack with entire success, secured the whole of the seventy-six guns opposed to them, and cleared the entire length of the hostile works; the enemy falling back on the reserve, which arrived just in time to prevent their total destruction. Thus strengthened, the vanquished Seiks were enabled to recross the Sutlej without molestation. The English found full and melancholy occupation in burying their dead and nursing the wounded. Nearly 700 perished on the field; and of above 1,700 placed in hospital at Ferozepoor, 600 died or were disabled from further service.

The great loss thus sustained, and the want of a battering train, prevented the conquerors from marching on Lahore, and bringing the war to a summary conclusion. Many weeks elapsed before the arrival of reinforcements enabled Sir Hugh Gough again to take the field; and in the interval, the Seiks threw a bridge of boats

across the Sutlej, and encamped at Sobraon, on the left bank of the river, where, under the direction of two European engineers, they constructed an almost impregnable *tête-du-pont*. Another body crossed the river and took post at the village of Aliwal, near Loodiana. Sir Harry Smith was dispatched from Ferozepoor to relieve Loodiana, which having effected, he marched against Aliwal with a force of about 10,000 men, and advanced to the attack on the 28th Jan., 1846, with his entire line. A brief cannonade and a cavalry charge was followed by the onset of the infantry: the village was carried by the bayonet, the opposing guns captured, and the foe driven with great slaughter across the river. Smith returned to Ferozepoor on the 8th of February, and on the following day the long-expected heavy guns reached the British camp. Before daybreak on the 10th the troops marched forth to attack the formidable intrenchments of an enemy estimated at 54,000 men, and supported by seventy pieces of artillery. The British numbered 16,000 rank and file, with ninety-nine guns. They advanced under a murderous fire from cannon, muskets, and camel guns, and in more than one place were repeatedly forced back, but the charge was invariably renewed. Line after line was carried, in the accustomed manner, by the bayonet, and the victory was completed by the fierce onslaught of a body of cavalry, under General Thackwell. The Seik guns, camel swivels, and standards were abandoned, and the retreating mass driven over their bridge of boats across the river, hundreds perishing by the fire of the horse artillery, and many more being drowned in the confusion. The English lost 320 killed (including the veteran Sir Thomas Dick, with other officers of note), and the wounded amounted to 2,063. The victorious army marched to Lahore; and there, beneath the city walls, dictated the terms of peace. The governor-general was disposed to recognise the claims of the boy Duleep Sing as Maharajah, and 10,000 men were left at Lahore (under the command of Sir John Littler) for his support and the preservation of peace. The Seik government, or durbar, consented to defray the expenses of the war, amounting to a million and a-half sterling, and agreed to the disbandment of their turbulent soldiery, of whom the majority had been already temporarily dispersed. Sir Henry Hardinge returned to England, and was rewarded for zealous and successful service by eleva-

tion to the peerage; a similar mark of royal favour was conferred on Sir Hugh Gough.

DALHOUSIE ADMINISTRATION: 1848 to 1855.—The recent Seik treaty was not carried out, and appears to have been merely signed as a means of gaining time. A new series of crimes and intrigues commenced; and, as before, hatred of the English was the only common feeling of the various leaders of factions. The first signs of open hostility appeared in the ancient city of Mooltan, the capital of a petty state between the Indus and the Sutlej, conquered by Runjeet Sing in 1818. The British assistant Resident (Mr. Vans Agnew) and Lieutenant Anderson of the Bombay army, were assassinated in the fortress by Moolraj the governor, against whom hostile operations were immediately commenced; the earlier of which were characterised by a remarkable display of energy and judgment on the part of Major Herbert Edwardes, then a subaltern, "who had seen but one campaign."\* The strong fortress of Mooltan was besieged in August, and would probably have been captured in the following month, but for the treacherous defection of a large body of Seik auxiliaries, which, with other unmistakable indications of hostility, left (in the words of Lord Dalhousie) "no other course open to us than to prosecute a general Punjab war with vigour, and ultimately to occupy the country with our troops."

In November, 1849, a British army, under Lord Gough, again took the field, and marched from Ferozepoor to Ramnuggur, near the Chenab, where a Seik force lay encamped. The attack of the British proved successful, but their loss was heavy, and included the gallant General Cureton, Colonel Havelock, and Captain Fitzgerald. The Seiks retreated in order towards the Jhelum, while Lord Gough prepared to follow up his victory by an attack on Lahore. The siege of Mooltan, conducted by General Whish, was brought to a successful issue on the 2nd of January, 1849. The fortress was most vigorously defended, until its massive fortifications were completely undermined, and several practicable breaches effected. Orders had been given to storm the citadel at daybreak, and the troops were actually forming, when Moolraj presented himself at the chief gate, and proceeding straight to the tent of the English general, surrendered the keys and his own sword.

\* *Year on the Punjab Frontier*, pp. 381-2.

A garrison was left in Mooltan, and the remainder of the army marched off to join the commander-in-chief, but arrived too late to share the peril and the glory of the much-criticised battle of Chillianwallah. Events so recent are hardly fit subjects of history. It is seldom until the chief actors have passed away from the stage that the evidence brought forward is sufficiently clear and full to enable the most diligent investigator to form a correct judgment on their merits and demerits.

Early in January, Lord Gough proceeded towards the Chenab, and found, as he expected, the Seiks strongly posted near Chillianwallah, with their artillery planted in a commanding and safe position, under cover of some low but dense jungle. The British marched to the attack, as they had often done before, amid a storm of grape and shell, and after a long and sanguinary engagement, which lasted till after nightfall, carried the murderous guns with the bayonet, and purchased victory with the loss of 757 killed and above 2,000 wounded. The carnage among the Seiks must have been yet more terrible; nevertheless, being joined by a body of Afghan horse, they prepared to renew the contest. The final struggle took place on the 21st of February, a few miles from the town of Gujerat. The battle was opened by Lord Gough with a fierce cannonade, which was maintained without intermission for nearly three hours. At the expiration of that time the Seiks made a retrograde movement, upon which the whole British force rushed forth on the foe, and with bayonet, lance, and sword completed the overthrow commenced by the heavy guns. Chutter Sing, Sheer Sing, and other leaders, surrendered to the victors; the Afghans fled across the Indus; the Seik forces were disbanded; and there being in truth no legitimate heir to the usurpations of Runjeet Sing, the Punjab was unavoidably annexed to British India. Its present satisfactory and improving condition will be found described in an ensuing section.

*Second Burmese War.*—Nearly two years were passed by the governor-general in active usefulness, without any interruption of the general tranquillity; the only occasion for military interference being to suppress the inroads of the Afreedes and other predatory tribes in the vicinity of Peshawur. The sole quarter from which hostility was anticipated was Burmah, the very one from which it was most earnestly to be depre-

cated by all inclined to take warning by past experience.

The Earl of Dalhousie was deeply impressed with this conviction, and scrupled not, with characteristic frankness, to declare his opinion, that "conquest in Burmah would be a calamity second only to the calamity of war."\* The deeply disordered finances of India had been rapidly improving under his peaceful and able administration, and he looked forward with sincere repugnance to a contingency which would assuredly produce "exhausted cash balances and reopened loans."† Nevertheless, a series of unfortunate events produced the renewal of war. The treaty of Yandaboo had been preserved inviolate by the sovereign with whom it was made; but his deposition, in 1837, gave a new turn to affairs. His usurping brother, known to the English as a military leader by the name of Prince Therawaddi, manifested great annoyance at the presence of a political agent at Ava, and the residency was in consequence removed to Rangoon, and subsequently altogether withdrawn from Burmah. The British continued to trade with Rangoon for the following twelve years; and during that time many complaints of oppression and breach of treaty were brought against the Burmese government, but none of these were deemed of sufficient extent or significance to call for the interference of the Calcutta authorities, until the close of 1851, when the commanders of two British vessels laid before Lord Dalhousie a formal statement of oppressive judgments delivered against them by the governor of Rangoon in his judicial capacity. Commodore Lambert was dispatched from Calcutta with full and very clear instructions regarding the course to be pursued—namely, first to satisfy himself regarding the justice of these allegations, and then to demand about £900 as compensation.

On reaching Rangoon, numbers of resident traders (styled by Lord Ellenborough the Don Pacificoes of Rangoon) pushed off in their boats with a strange assortment of complaints against the governor; whereupon Commodore Lambert, without waiting to consult Lord Dalhousie on the subject, broke off all intercourse with the local functionary, and commanded him, in very peremptory language, to forward a letter to the King of Ava, stating the object of the British mission, and demanding the disgrace

of the offending intermediary. The letter was dispatched, and an answer returned, that the obnoxious individual had received his dismissal, and that the required compensation would be granted. A new governor arrived at Rangoon, whose conduct induced the commodore to doubt the sincerity of the professions made by the Burmese authorities; and so far he was probably correct. But, unfortunately, his peculiar position as a Queen's officer,‡ is alleged to have given him a sort of independence, which induced the violation of Lord Dalhousie's express injunction, that no act of hostility should be committed by the British mission, however unfavourable its reception, until definite instructions had been obtained from Calcutta. The refusal of the governor to receive a deputation sent by the commodore at mid-day on the 6th Jan., 1852,—offered by the Burmese attendants on the plea that their master was asleep, according to custom, at that hour (and afterwards excused on the plea that the deputies were intoxicated, which has been wholly denied),—was immediately resented by a notice from the commodore for all British subjects to repair to the squadron—an order which was obeyed by several hundred men, women, and children. No opposition was made to their embarkation, but those who remained behind were thrown into prison. The next and wholly unauthorised measure was to take possession of a painted war-hulk, styled the "yellow ship," belonging to the King of Ava, which lay at anchor a little above the British vessels. This procedure, which has been almost universally censured, produced a declaration from the governor of Rangoon, that any attempt to carry away the property of the king, would be forcibly resisted. The British persisted in towing the vessel out of the river; and on passing the great stockade, or battery, a fire was opened on them, but soon silenced by a broadside from the squadron, which "must have done great execution."§ Commodore Lambert declared the coast of Burmah in a state of blockade, and left in a steamer for Calcutta, to seek other instructions than those he had violated in ill-judged retaliation.

The notoriously hostile spirit of the Burmese government, probably induced Lord Dalhousie to confirm the general proceedings of Lambert, despite his undisguised disapproval of the seizure of the "yellow ship."

\* Further (Parl.) Papers on Burmese war, p. 44.

† *Idem*, p. 87.

‡ Cobden's *Origin of Burmese War*, 7.

§ Lambert's Despatch. Further Papers, 41.

The previous demand for compensation was reiterated and received with a degree of evasion which was deemed equivalent to rejection; and both parties made ready for an appeal to arms. The British commander-in-chief, Lord Gough, was absent at Simla; but though a brave soldier, he was a man of advanced age; and the ability of Lord Dalhousie and his council abundantly sufficed to overcome all deficiencies, including those encountered in the raising of the Madras contingent, through the insubordination of the governor, Sir Henry Pottinger, who tacitly opposed Lord Dalhousie at every point,—not through any conscientious feeling regarding the war, but simply from personal irritation, caused by some petty jealousy of office.\* The Bombay authorities, aided by the head of the Indian navy (Commodore Lushington) and his able subordinates, captains Lynch and Hewett, bestirred themselves actively in the preparation of the steam fleet, and on the 2nd of April the Bengal division arrived at the mouth of the Rangoon river; the previous day having been fixed by the governor-general as that on which the King of Ava was to decide whether he would avoid war by the payment of £100,000 in consideration of the expenses incurred by the British, and sanction the residence of an accredited agent at Rangoon, in compliance with the treaty of Yandaboo. The steamer dispatched to Rangoon to receive the reply of the Burmese government, was compelled to retreat under a shower of shot from the stockades lining the river; and the campaign commenced. Martaban was stormed with little loss, and occupied by a strong garrison. The Madras division arrived soon after; and the united forces amounted to about 8,000 men, commanded by General Godwin, an active and fearless veteran, who had served under Campbell in the previous war, but whose projects were sadly fettered by an exaggerated respect for the proceedings of his predecessor. Rangoon was blockaded on the 10th of April, 1852, and the following day (Easter Sunday) witnessed a desperate and prolonged struggle. The intense heat, under which many officers dropped down dead, impeded operations; and it was not until the 14th that the fall of the Golden

Pagoda completed the capture of Rangoon, which was obtained with the loss to the victors of about 150 killed and wounded. Bassein (once the head-quarters of the Portuguese in Eastern India) was carried with ease in June, and strongly garrisoned; but the dilapidated city of Pegu, which next fell into the hands of a British detachment, though evacuated on their approach, was abandoned by them, owing to insufficiency of troops. General Godwin sent to Calcutta for reinforcements, and especially for light cavalry, horse artillery, and a field battery. These were assembled and dispatched with all possible celerity; and the governor-general, probably dissatisfied with the progress of hostilities, himself visited the seat of war. Prome was taken possession of in July, but abandoned, like Pegu, for want of men, upon which the enemy returned, and made preparations for its defence. The reinforcements which reached the British cantonments in September, raised the army under General Godwin to nearly 20,000 efficient troops, and might, it was considered, have amply sufficed for more extensive enterprises than were attempted. Prome was recaptured, with little difficulty, in October, and Pegu in November; and both places were permanently occupied. An effort was made for the recovery of Pegu by the Burmese, which proved ineffectual; and an engagement with a body of the enemy, near Pegu, was chiefly remarkable for the gallantry displayed by the irregular Seik horse, who proved valuable auxiliaries to their late conquerors.

In December, 1852, the governor-general declared the province of Pegu annexed to the British empire, and intimated that no further hostilities would be pursued by the Anglo-Indian government, if the Burmese were content to submit quietly to the loss of territory which, it must be remembered, they had themselves acquired by usurpation. A new revolution at Ava, caused by the deposition of the king, Therawaddi, by one of his brothers (a procedure similar to that by which he raised himself to the throne), occasioned a cessation of foreign hostilities,† and it would appear that the Burman court and people are really solicitous for the

ry he was personally instrumental. The murder was committed in the dead of night, and nothing but life was taken. The assertion that a woman's garment was found on the body, though often repeated, has been authoritatively denied; and of the whole mysterious affair nothing is certain but the death of a brave, scientific, and energetic officer.

\* See an able article entitled "Annals of the Bengal Presidency for 1852," *Calcutta Review*, Mar., 1853.

† The assassination of Captain Latter, the deputy commissioner at Prome, in December, 1853, has been variously attributed to the treachery of the Burmese government, and to the vengeance of a petty chief, in whose subjugation to British autho-



continuance of peace. Some disappointment was occasioned by the embassy voluntarily dispatched by the King of Ava to the governor-general, and the mission sent in friendly reciprocity to Ava, resulting in no treaty of alliance or commerce. The governor-general, however, had from the first "deprecated the reconstruction of any treaty relations with the court of Ava at all;" and at the close of his administration, he declared, that he still considered "peace with Ava as even more likely to be maintained in the absence of all commercial or friendly treaties, than if those conventions had been renewed as before."\*

*Sattara*.—On the death of the rajah, on the 5th of April, 1848, the principality was annexed to the British territories by right of lapse, the rajah leaving no male heir.

*Jhansie*, a small Mahratta state in Bundelcund, lapsed in a similar manner to the British government on the death of its last chief, in November, 1853.

*Hyderabad*.—On the 21st of May, 1853, the Nizam signed a treaty, which provided for the liquidation of his heavy and long-standing debt to the company, and for the maintenance of the stipulated military contingent, by the cession of the districts of Berar Paycen Ghaut, the border districts from thence down to Shorapoor, and the territory of the Doab between the Kistna and the Toombuddra.†

*Nagpoor, or Berar*.—This kingdom, which had been made over to Rajah Ragojee by the British government after it had been forfeited by the treachery of Appa Sahib, was left without an hereditary heir on the death of the rajah in December, 1853. There remained no male of the line, descended from the stock, and bearing the name of Bhonslah. The dominions of Berar, or Nagpoor, were therefore considered to have lapsed, and were incorporated in the Anglo-Indian empire. There were other annexations of less importance, such as the raj of *Ungool* (in the Jungle Mahals), and a portion of the land of the rajah of *Sikkim* (a hill chieftain, on the borders of Nepal.)

In *Sinde*, Ali Morad, of Khyrpoor, was accused of having forged a clause in a treaty,

\* Minute by the Marquis of Dalhousie, dated 28th February, 1856, reviewing his administration in India from January, 1848, to March, 1856.—(Parl. Papers, 16th June, 1856.)

whereby he had wrongfully obtained possession of land which of right belonged to the British government; and his guilt being held to be proved, his lands were confiscated.

*Oude*.—The closing act of Lord Dalhousie's administration was the annexation of Oude, the government of which country was assumed by his lordship, February 7th, 1856. The reasons for this measure, and the mode of its accomplishment, have been so much discussed in connexion with the military mutiny of the Bengal army, which broke out in the following year, that it may perhaps best suit the convenience of the reader, to postpone the relation of the annexation until a subsequent section. The chapters immediately succeeding the present one will, it is hoped, afford an insight into the physical and topographical character of the country—a view of the numbers and distribution of the vast and varied population of India—the mode of government—extent of army—amount of commerce and revenue—the field of missionary and educational operations, &c.; which will make the narrative of the mutiny, and its attendant circumstances, more easily understood than it could be without such previous information.

In reviewing his eight years' administration, Lord Dalhousie adverted to the rapid progress of civilisation in India; to the establishment of railways at the three presidencies and in *Sinde*; of telegraphic communications between the chief cities; of cheap and uniform postage; the improved means of conveyance by land and water; encouragement to agriculture and irrigation; the reduction of impost dues; the creation of a loan for public works; and the open discussion of governmental projects and acts. Before his departure, the insurrection of the *Sonthals* (an aboriginal race, located near the Rajmahal hills in *Bahar*), in 1855, was repressed, and precautions taken to prevent a recurrence. Finally, Lord Dalhousie took his leave, declaring, that he "left the Indian empire in peace without and within;" and "that there seemed to be no quarter from which formidable war could reasonably be apprehended at present."‡

† Parl. Papers—Commons, 26th July, 1854; pp. 34; 144.

‡ Minute of 2nd of February, 1855.

Date.	Usual Name of Battle or Place.	Under whose Administration.	Enemy against whom Fought.	Strength of British Army.						Total.	
				Europeans.			Native.				
				Artillery.		Cavalry.	Infantry.	Cavalry.			Infantry.
				Guns.	Men.						
14th Nov., 1751	Siege of Arcot—see p. 264.	Mr. Sanderson, Govr. of Madras.	Reza Sahib, son of Chunda Sahib, the Nabob of Arcot.	5	—	—	200	—	300	500	
23d June, 1757	Plassy; in Nuddea dist.—see p. 278.	Clive.* . . .	Surajah Dowlah, Nabob of Bengal.	10 eight 6-pds. and 2 howts.	150	—	850	—	2,300	3,300	
15th Jan., 1761	Battle of Patna—see p. 293.	Mr Vansittart.	Shah Alum, Emperor of Delhi.	—	—	—	—	—	—	—	
2nd Aug., 1763	Geriah; near Sootee, Moorshedabad—p. 297.	Ditto . . .	Meer Cossim, ex-Nabob of Bengal.	—	—	—	750	750	1,500	3,000	
5th Sept., 1763	Oodwanulla Fort; Bhaugulpoor dis.	Ditto . . .	Ditto . . . . .	—	—	30	00	—	—	3,000	
6th Nov., 1763	Patna taken by storm—p. 298.	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	—	
23rd Oct., 1764	Buxar—p. 299 . .	Ditto . . .	Vizier of Oude . .	20	—	—	857	918	5,297	7,072	
6th Mar., 1793	Scedaseer; near Periapatam—p. 379.	Marquis Wellesley.	Tippoo Sultan . .	—	—	—	—	—	—	6,420	
27th Mar., 1799	Malavelly; in Mysoor—p. 379.	Ditto . . .	Tippoo . . . . .	—	756	912	4,608	1,766	11,061	41,649	
4th May, 1799	Seringapatam, Storm of, p. 381.	Ditto . . .	Ditto . . . . .	—	—	—	—	2,726	20,000	Gun Lascars. Nizam's Con. 20000 <sup>a</sup>	
4th Sept., 1803	Allyghur Fort, Storm of, p. 396.	Ditto . . .	Mahrattas, commanded by French officers	—	—	—	—	—	—	3,000	
11th Sept., 1803	Delhi—p. 396 . . .	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	4,500	
23rd Sept., 1803	Assaye; in Hyderabad ter.—p. 395.	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	4,500	
1st Nov., 1803	Laswarree—p. 397.	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	4,500	
25th Nov., 1803	Argaum—p. 398 . .	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	—	
14th Dec., 1803	Gawilghur Fort—p. 398.	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	—	
13th Nov., 1804	Deeg; nr. Bhurtpoor—p. 402.	Ditto . . .	Mahrattas (Holcar)	—	—	—	—	—	—	4,648 <sup>a</sup>	
24th Dec., 1804	Deeg Fort—p. 401	Ditto . . .	Rajah of Bhurtpoor.	—	—	—	—	—	—	3,000 <sup>a</sup>	
9th Jan., 1805	Unsuccessful storm of Bhurtpoor.	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	3,382 <sup>a</sup>	
21st Jan., 1805	Second do. } pp.	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	—	
20th Feb., 1805	Third do. } 401-2.	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	—	
21st Feb., 1805	Fourth do. }	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	—	
31st Oct., 1814	Unsuccessful attack of Kalunga Fort—p. 411.	Marquis Hastings.	Goorkhas . . . . .	—	—	—	—	—	—	2,737	
27th Nov., 1814	Do. assault, p. 412.	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	2,477	
27th Feb., 1816	Muckwanpoor—p. 413.	Ditto . . .	Ditto . . . . .	—	—	—	—	—	—	10,000 <sup>a</sup>	
5th Nov., 1817	Kirkee, nr. Poona—p. 417.	Ditto . . .	Mahrattas . . . . .	—	—	—	—	—	—	2,800	

\* In the fifty days during which the siege was protracted, the British loss in defeating the attempt to storm was only four Europeans killed and two sepoy wounded.

<sup>b</sup> This number includes the sick; the number that actually repulsed the storm on the 14th November amounting to 80 Europeans and 120 sepoy.

<sup>c</sup> On the 14th November; there are no means of ascertaining previous casualties.

<sup>d</sup> Of these 150 were French.

<sup>e</sup> The powers of the governor and council of Calcutta, in civil and commercial affairs, were preserved to them, but in all military matters Clive was invested with independent authority.

<sup>f</sup> Some say 35,000 infantry, 15,000 cavalry; also forty Frenchmen with four light pieces of artillery.

<sup>g</sup> One of the remarkable events of this battle was the capture of Monsieur Law, who, with a few French troops, had hitherto been the chief support of the native armies against the English.

<sup>h</sup> Worked by 170 Europeans.

<sup>i</sup> Exclusive of large bodies of irregular cavalry.

<sup>j</sup> Of these 2,000 were drowned in the Caramassa.

<sup>k</sup> This includes sixteen missing.

<sup>l</sup> The number is stated between 40,000 and 50,000.

<sup>m</sup> This was the whole force employed in the siege; the two divisions which carried the place did not number more than 4,000 men.

<sup>n</sup> These numbers include the casualties during the whole period of the siege, from 4th April to 4th May.

<sup>o</sup> The number estimated to have fallen in the assault.

<sup>p</sup> Exclusive of the Rajah of Berar's infantry and Sindia's irregular corps.

Guns.	Enemy.			British Army Killed and Wounded.								Enemy.		Artillery captured.	Name of British Commander.
	Cavalry.	Infantry.	Total.	Killed.				Wounded.				Killed.	Wounded.		
				Europeans.		Natives.	Total.	Europeans.		Natives.	Total.				
				Offi- cers.	Men.			Offi- cers.	Men.						
9	3,000	7,150 <sup>a</sup>	10,150	1	45	30	76 <sup>a</sup>	2	22	5	227 <sup>b</sup>	40	0 <sup>c</sup>	8	Captain (afterwards Lord) Clive.
54 24 & 32- pds.	18,000	50,000	58,000 <sup>d</sup>	—	6	16	22	2	10	36	48	60	0	50	Clive.
—	10,000	10,000	20,000	—	—	—	—	—	—	—	—	—	—	—	Major Carnac.
—	20,000	8,000	28,000	—	—	—	—	—	—	—	—	—	—	17 <sup>b</sup>	Major Adams.
—	60,000	60,000	60,000	—	—	—	—	—	—	—	—	—	—	100	Ditto.
—	—	10,000	10,000	—	—	—	—	—	—	—	—	—	—	—	Major Carnac.
—	40,000	40,000	40,000	—	—	—	—	—	—	—	—	4,000 <sup>e</sup>	—	133	Major Munro.
—	40,000	40,000	40,000	—	—	—	45 <sup>k</sup>	—	—	—	98	2,000	—	—	General Stuart.
—	45,000 <sup>l</sup>	45,000	45,000	—	—	—	—	—	—	—	—	2,000	—	—	General Harris.
—	—	—	48,000	22	181	119	322 <sup>a</sup>	45	622	420	1,087 <sup>a</sup>	8,000 <sup>c</sup>	—	—	Lord Harris.
—	—	—	—	6	49	—	55	11	19	4	205	2,000	—	281	General (afterwards Lord) Lake.
—	—	—	19,000	5	10	2	107	11	33	5	346	3,000	—	68	General Lake.
—	35,000	10,500	45,500 <sup>p</sup>	23	40	3	426	30	1,106	—	1,136	1,200 <sup>q</sup>	—	98	Gl. Wellesley (Duke of Wellington.)
72	4,500	9,000	13,500	11	16	1	172	25	62	6	651	7,000	—	71	General Lake.
—	—	—	—	—	4	6	—	9	29	1	300	—	—	38	General Wellesley.
—	—	—	—	1	—	—	—	2	12	3	125	—	—	52	Colonel Stevenson.
—	—	—	15,000 <sup>r</sup>	5	—	—	—	17	62	1	638	2,000 <sup>a</sup>	—	87	Major-general Fraser.
—	—	—	—	2	41	—	43	13	171	—	184	—	—	100	Lord Lake.
—	—	—	—	5	38	42	85	23	183	165	371	—	—	—	Lord Lake.
—	—	—	—	3	—	—	—	15	57	3	588	—	—	—	Ditto.
—	—	—	—	1	48	113	162	27	456	556	732	—	—	—	Ditto.
—	—	—	—	6	63	56	125	27	452	452	862	—	—	—	Ditto.
—	—	—	400	5	4	23	32	15	50	163	228	—	—	—	Major-general Gillespie.
—	—	—	550	4	15	18	37	7	215	221	443	48	0	—	Colonel Mawbey.
—	—	—	12,000	1	11	34	46	1	19	156	176	80	0	—	Major-general Ochterlony.
—	—	—	25,000	—	17	2	19	1	55	11	67	50	0	—	Lieutenant-colonel C. B. Burr.

<sup>a</sup> A large number of the wounded were scattered over the country.

<sup>b</sup> The amount of the British force is not stated; it must, however, have been considerable, as a junction had been effected between the forces of General Wellesley and Colonel Stevenson. The force placed at the disposal of the former, at the commencement of the campaign, amounted to 9,000; that of the latter to 8,000 men.

<sup>c</sup> Major-general Fraser's force consisted of H.M.'s. 76th regiment, the Company's European regiment, and four battalions of sepoy, exclusive of two battalions left for the protection of the baggage. The strength of the four battalions and the two European regiments engaged in the attack, may be estimated at the amount stated in the Table.

<sup>d</sup> Thorn says twenty-four battalions of infantry, besides a considerable body of horse. Captain Thornton states that the cavalry, swelled by numerous adventurers, amounted to 60,000, to which were added 15,000 well-disciplined infantry. The numbers specified in the Table are those of the infantry alone.

<sup>e</sup> Besides a large number drowned in a morass.

<sup>f</sup> This number has reference only to the strength of the storming party. Lord Lake appears to have been present with his whole army, which consisted of upwards of 10,000 men.

<sup>g</sup> The enemy's extensive intrenchments were occupied by a large force, but the numbers are not stated. The troops are represented to have consisted of several of the Rajah of Bhurtpoor's battalions, and the remaining infantry of Holcar.

<sup>h</sup> This number comprises only the storming party. See Note to Deeg.

<sup>i</sup> The Bombay division, consisting of four battalions of sepoy, H.M.'s. 86th regiment, eight companies of the 65th, with a troop of Bombay cavalry, and 500 irregular horse, had now joined Lord Lake's force before Bhurtpoor.

<sup>j</sup> Sir David Ochterlony had a force of near 20,000 men, including three European regiments. He divided this force into four brigades, with two of which he marched to Muekwanpoor.

462 CHRONOLOGICAL LIST OF PRINCIPAL BATTLES AND SIEGES

Date.	Usual Name of Battle or Place.	Under whose Administration.	Enemy against whom Fought.	Strength of British Army.						Total.
				Europeans.				Native.		
				Artillery.		Cavalry.	Infantry.	Cavalry.	Infantry.	
				Guns.	Men.					
26th and 27th Nov., 1817.	Seetabuldee; near Nagpoor—p. 418.	Marquis Hastings.	Mahrattas . . . .	—	—	—	—	—	—	1,400
21st Dec., 1817	Mahidpoor, p. 420	Ditto . . . .	Ditto . . . . .	—	—	—	—	—	—	11,305
1st Jan., 1818	Corygaum, Defence of—p. 418.	Ditto . . . .	Arabs in pay of Peishwa.	2	—	—	—	—	—	750
20th Feb., 1818	Ashtee Combat—p. 419.	Ditto . . . .	Peishwa . . . . .	—	—	—	—	—	—	419
27th Feb., 1818	Talneir, Storm of Soonee Battle . .	Ditto . . . .	Arabs . . . . .	—	—	—	—	—	—	—
17th April, 1818	Chanda Assault . .	Ditto . . . .	Mahrattas . . . .	—	—	—	—	—	—	513 <sup>b</sup>
20th May, 1818	Malligaum taken by Storm.	Ditto . . . .	Ditto . . . . .	—	—	—	—	—	—	6,500 <sup>c</sup>
18th to 29th May, 1818.	Malligaum taken by Storm.	Ditto . . . .	Arabs in Native employ.	—	—	—	—	—	—	2,630
8th to 10th June, 1818.	Satunwarree Fort; unsuccessful attack.	Ditto . . . .	Mahrattas . . . .	—	—	—	—	—	—	550 <sup>c</sup>
31st Jan., 1819	Nowah; Hyderabad.	Ditto . . . .	Arab Garrison . .	—	—	—	—	—	—	—
9th April, 1819	Asseerghur taken by Storm—p. 420.	Ditto . . . .	Sindia's Commandant, Jeswunt Rao Laar.	—	—	—	—	—	—	20,000 <sup>c</sup>
10th June, 1824	Kemendine, p. 424	Lord Amherst	Burmese . . . . .	100	—	—	—	—	—	—
30th Oct., 1824	Martaban—p. 425	Ditto . . . .	Ditto . . . . .	—	—	—	—	—	—	219 <sup>a</sup>
18th Jan., 1826	Bhurtpoor Storming—p. 427.	Ditto . . . .	Rajah of Bhurtpoor	—	—	—	—	—	—	25,000
19th Jan., 1826	Melloone Storming—p. 427.	Ditto . . . .	Burmese . . . . .	—	—	—	—	—	—	—
23rd July, 1839	Ghuznee Capture—p. 436.	Lord Auckland.	Afghans . . . . .	—	—	—	—	—	—	4,863
13th Nov., 1839	Kelat; in Beloochistan.	Ditto . . . .	Ditto . . . . .	—	—	—	—	—	—	1,261
7th April, 1842	Jellalabad Defence	Lord Ellenborough.	Ditto . . . . .	—	—	—	—	—	—	1,360
13th Sep., 1842	Tezeen Battle . .	Ditto . . . .	Ditto . . . . .	—	—	—	—	—	—	—
17th Feb., 1843	Meancee; Sinde—p. 451.	Ditto . . . .	Beloochees . . . .	—	—	—	—	—	—	2,600
24th Mar., 1843	Hyderabad; Sinde—p. 452.	Ditto . . . .	Ditto . . . . .	—	—	—	—	—	—	—
29th Dec., 1843	Puniar; Gwalior—p. 452.	Ditto . . . .	Mahrattas (Sindia)	—	—	—	—	—	—	2,000
29th Dec., 1843	Maharajpoor—p. 452.	Ditto . . . .	Ditto . . . . .	40	—	—	—	—	—	14,000
18th Dec., 1845	Moodkee; left bank of Sutlej—p. 454.	Lord Hardinge.	Seiks, under Rajah Lall Sing.	—	3,850	—	—	8,500	—	12,350
21st and 22nd Dec., 1845.	Ferozshah; on the Sutlej—p. 454.	Ditto . . . .	Seiks . . . . .	65	5,674	—	—	12,053	—	17,727
28th Jan., 1846	Aliwal; on the Sutlej.	Ditto . . . .	Seiks, under Runjoor Sing.	24	—	—	—	—	—	10,000
10th Feb., 1846	Sobraon; on the Sutlej.	Ditto . . . .	Seiks . . . . .	90	—	—	—	—	—	16,224
2nd Jan., 1849	Mooltan, Siege of .	Lord Dalhousie.	Seiks, under Moolraj.	150	—	15,000	—	17,000	—	32,000
13th Jan., 1849	Chillianwalla; in the Punjab.	Ditto . . . .	Seiks . . . . .	125	—	—	—	—	—	22,000
21st Feb., 1849	Gujerat; in the Punjab.	Ditto . . . .	Ditto . . . . .	96	—	—	—	—	—	25,000
14th Apr., 1852	Rangoon . . . . .	Ditto . . . .	Burmese . . . . .	—	—	—	—	—	—	—
Sept., 1852 . .	Prome . . . . .	Ditto . . . .	Ditto . . . . .	—	—	—	—	—	—	—
Dec., 1852 . .	Pegu . . . . .	Ditto . . . .	Ditto . . . . .	—	—	—	—	—	—	—

<sup>a</sup> In Col. Blacker's *Memoir*, p. 18, Holcar's force is estimated at 20,000 horse and 8,000 foot.

<sup>b</sup> The numbers here given have reference to the strength of the cavalry. In addition to this, there appears to have been a detachment of horse artillery.

<sup>c</sup> The force consisted of 1,000 native cavalry, a troop of horse artillery, a company of European foot artillery, 3,000 native infantry, 2,000 irregular horse, with three 18-pounders, four brass 12's, six howitzers, and twelve 6-pounders.

<sup>d</sup> Native garrison.

Guns.	Enemy.			British Army Killed and Wounded								Enemy.		Artillery captured.	Name of British Commander.
	Cavalry.	Infantry.	Total.	Killed.				Wounded.				Killed.	Wounded.		
				Europeans.		Natives.	Total.	Europeans.		Natives.	Total.				
				Offi- cers.	Men.			Offi- cers.	Men.						
—	12,000	8,000	20,000	4	12	0	124	11	23	0	241	30	0	—	Lieutenant - colonel H. Scot.
70	—	—	—	3	17	1	174	35	56	6	601	3,000	—	63	L.-gen. Sir T. Hislop. Captain Staunton
—	—	—	—	2	6	2	64	3	11	3	116	—	—	—	—
—	9,000	—	9,000	—	—	—	19	1	—	—	—	20	0	—	Sir Lionel Smith
—	—	—	300	2	5	—	7	5	1	3	18	25	0	—	L.-gen. Sir T. Hislop.
—	—	—	—	—	—	—	—	—	—	—	3	1,000	—	5	Colonel Adams.
—	—	—	2,000	1	1	2	13	4	5	1	55	20	0	—	Ditto.
—	—	—	350 <sup>a</sup>	5	2	9	34	7	16	8	175	—	—	—	Lieutenant - colonel MacDowell.
—	—	—	250	1	1	0	11	1	7	4	75	—	—	—	Major Lamb.
—	—	—	500	—	—	—	22	6	17	4	180	40	0	—	Major Pitman.
—	—	—	1,350	1	4	6	47	9	25	7	266	43	95	119	Brigadier - general Doveton.
—	—	—	3,000	—	—	—	—	—	—	—	—	15	0	—	Sir A. Campbell.
—	—	—	3,500	—	—	—	7	1	1	3	14	—	—	—	Colonel Godwin.
—	—	—	—	—	61	42	103	—	283	183	466	4,000	—	—	Lord Combermere
—	—	—	10,000	—	—	—	5	3	1	7	20	—	—	—	Sir Archibald Campbell.
—	—	—	3,000	—	—	—	17	—	—	—	170	514	—	—	Sir John Keane.
—	—	—	2,000	1	3	1	32	8	9	9	107	400	—	—	Major-general Willshire.
—	—	—	6,000	—	—	—	—	—	—	—	—	—	—	—	Sir Robert Sale.
—	—	—	16,000	—	—	—	32	3	12	7	130	—	—	—	General Pollock.
15	—	—	35,000	6	6	0	66	13	20	1	214	5,000	—	—	Sir Charles Napier
—	—	—	—	2	—	—	—	10	kill. & wond.	25	5	—	—	—	Ditto.
—	—	—	12,000	—	—	—	35	—	—	—	182	—	—	24	Major-general Grey
100	—	—	18,000	—	—	—	113	—	—	—	684	3,500	—	56	Lord Gough.
22	—	—	12,000	16	20	0	216	48	60	9	657	—	—	—	Ditto
—	—	—	35,000	48	8	206	694	1,103	618	—	1,721	—	—	88	Ditto.
—	—	—	19,000	—	—	—	176	—	—	—	413	—	—	68	Sir H. Smith.
—	—	—	34,000	—	—	—	320	—	—	—	2,063	—	—	—	Lord Gough.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	General Whish.
—	—	—	60,000	26	73	1	757	66	1,446	—	1,512	4,000	—	12	Lord Gough.
59	—	—	60,000	5	8	7	92	24	65	8	682	—	—	57	Ditto.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	General Godwin.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

<sup>a</sup> This was the number of men of which the storming party was composed.

<sup>b</sup> The British force present at the conclusion of the siege, consisted of—horse artillery, one troop and a-half; native cavalry, eight squadrons; foot artillery, five companies; European infantry, two battalions and a-half; native infantry, eleven and a-half battalions; irregular horse, 5,000; sappers and miners, thirteen companies: and probably exceeded, in the aggregate, the amount stated in the Table.

<sup>c</sup> The strength of the storming party.

[The above Table was prepared by order of the Court of Directors, at the request of the Author. The particulars which should appear in the columns left blank, cannot be furnished with perfect accuracy.]

## CHAPTER II.

### TOPOGRAPHY—MOUNTAINS AND PASSES—RIVERS—PLATEAUX—PROVINCES AND CHIEF TOWNS—CLIMATE AND DISEASES—GEOLOGY—SOIL—MINERALOGY.

Asia, — the largest and most diversified quarter of the globe, has for its central southern extremity a region of unsurpassed grandeur, comprising lofty mountains, large rivers, extensive plateaux, and wide-spread valleys, such as are not to be found within a like area in any other section of the earth. This magnificent territory, known under the general designation of India,\* is in the form of an irregular pentagon, with an extreme extent, from north to south and from east to west, of 1,800 miles; a superficial area of 1,500,000 square miles; and a well-defined boundary of 9,000 English miles.†

The geographical position of India possesses several advantages. On the north, it is separated from China, Tibet, and Independent Tartary, for a distance of 1,800 miles, by the Himalayan chain and prolongations termed the Hindoo-Koosh, whose altitude varies from 16,000 to 27,000 feet (three to five miles), through which there is only one pass accessible to wheeled carriages (Bamian.) This gigantic wall has at its base an equally extended buttress, the sub-Himalaya and Sewalik hills, with, in one part, an intervening irregular plateau (Tibet) of 90 to 150 miles wide: on the *West*, the Hindoo-Koosh is connected by the low Khyber ranges with the lofty Sufied-Koh, and its conjoint the Suliman mountains, which rise 10,000 feet, like a mural front, above the Indus valley, and have a southerly course of 400 miles; the Suliman are connected by a transverse chain with the Bolan mountains, which proceed nearly due south for 250 miles, and become blended with the Keertar, Jutteel, and Lukkee hills; the latter terminating in the promontory of Cape Monze, a few miles to the north-west of the Indus mouth. This *western* boundary of 900 miles, supports the table-lands which constitute a large part of Afghanistan and Beloochistan: to these there are four principal ascents—the Khyber, Gomul, Bolan, and Gundava passes, readily defensible against the strategic

movements of any formidable enemy. On the *East*, an irregular series of mountains, hills, and highlands, extend from the source of the Brahmopootra, along the wild and unexplored regions of Naga, Munneepoor, and Tipperah, through Chittagong and Arracan to Cape Negrais (the extremity of the Youmadoung range), at the mouth of the Irrawaddy river; to the southward and eastward of Pegu and Martaban, the Tenasserim ridge commences about one hundred miles distant from the coast, and prolongs the boundary to the Straits of Malacca, along the narrow strip of British territory which fronts the Bay of Bengal. The length of this *eastern* frontier is 1,500 miles, and it forms an effectual barrier against aggression from the Burmese, Siamese, or Malays, with whose states it is conterminous. On the *South*, the shores of the above-described territory are washed by the Bay of Bengal, the Straits of Malacca, the Indian Ocean, and the Arabian Sea, for 4,500 miles. The natural frontiers of this extensive region may be thus summarily noted:—north, along the Himalaya, 1,800; west, along Afghanistan, &c., 900; east, along Burmah, Siam, &c., 1,800: total by land, 4,500; by sea, 4,500 = 9,000 English miles.

No pen-and-ink description can convey an adequate idea of India as a whole; the mind may comprehend separate features, but must fail to realise at one view a complete portraiture, especially if devoid of unity of configuration: in several countries a mountain ridge and a main conduit form an outline, around which the chief topographical peculiarities may be grouped; but the region before us contains several lines of great length and elevation, with diverse axis of perturbation, and declinations to three of the cardinal points, causing numerous rivers, flowing S.W. (Indus); S.E. (Ganges); S. (Brahmopootra and Irrawaddy); W. (Nerbudda, Taptee, and Loonee); E. (Godavery, Kistnah, Cauvery, and Mahanuddy); and in

\* See p. 13 for origin of word: old geographers designate the country as India *within* (S.W. of), and *beyond* (S.E. of) the Ganges.

† The reader is requested to bear in mind through-

out this work, that round numbers are used to convey a general idea, easy to be remembered; they must be viewed as approximative, and not arithmetically precise. Indian statistics are still very imperfect.

other directions according to the course of the mountain-ranges and the dip of the land towards the ocean, by which the river system is created and defined.

Irrespective of the circumscribing barriers, and of the bones and arteries (hills and streams) which constitute the skeleton of Hindoostan, three features, distinctively delineated, deserve brief notice. The snowy ranges on the north give origin to two noble rivers, which, as they issue from the lesser Himalaya, are separated by a slightly elevated water-shed, and roll through widely diverging plains—the one in a south-easterly direction to the Bay of Bengal, the other south-westerly to the Arabian sea; each swollen by numerous confluent rivers which, altogether, drain or irrigate an area equal to about half the superficies of India Proper. The Gangetic plain is 1,000, that of the Indus (including the Punjab), 800 miles in length; the average breadth of either, 300 miles; the greater part of both not 500 feet above the sea; the height nowhere exceeding 1,000 feet. Intermediate, and bifurcating the valleys of the main arteries, there is an irregular plateau, extending from north to south for 1,000, with a breadth varying from 300 to 500 miles, and a height ranging from 1,500 to 3,000 feet above the sea-level. Midway between Cape Comorin and Cashmere, this table-land is bisected from west to east, for 600 miles, by the narrow Nerbudda valley: the *northern* section, of an oblong shape, comprising Malwa, East Rajpootana, and Bundelcund, has for its south-eastern and north-western buttresses the Vindhya and Arravulli ranges, and a declination towards the Jumna and Dooab on the north-east, and to the Guzerat plain on the south-west: the *southern* section, constituting what is erroneously\* termed the Peninsula, contains the Deccan, Mysoor, Berar, and adjoining districts; forms a right-angled triangle,† supported on the north by the Sautpoora mountains, and on either side by the Western and Eastern Ghauts and their prolongations; the declination is from the westward to the eastward, as shown by the courses of the Godavery and Kistnah.

These prominent physical characteristics

\* There is no partial insulation—no isthmus.

† The northern and western sides are about 900 miles in length; the eastern 1,100.

‡ A full description of the geography of India would require a volume to itself; but the tabular views here given, and now for the first time prepared, will, with the aid of the maps, enable the reader to trace out the topography of the country.

maybe thus recapitulated. 1st. The extensive mountain circumvallation, east to west, from the Irawaddy to the Indus. 2nd. The two great and nearly level plains of the Ganges and Indus. 3rd. The immense undulating plateau, of 1,000 miles long, in a straight line from the Jumna to the Cauvery. To these may be added a low coast-line of 4,500 miles, skirted on either side of the Bay of Bengal, and on the Malabar shore of the Indian Ocean, by receding *Ghauts* and other lofty ranges, backed by inland ridges of hills, and mountains traversing the land in diverse directions, such as the Vindhya, Sautpoora, and Arravulli. These salient features comprise many varieties of scenery; but for the most part wide-spread landscapes extend on the east,—teeming with animal and vegetable life; sandy wastes on the west, where the wild ass obtains scanty provender; on the north, an arctic region, whose snowy solitudes are relieved from perpetual stillness by volcanic fires bursting from ice-capt peaks; on the south, luxuriant valleys, verdant with perpetual summer; a rocky coast at Kattywar, swampy sunderbunds at Bengal, jungly ravines in Berar, and fertile plains in Tanjore;—*here* Nature in sternest aspect,—*there* in loveliest form,—*everywhere* some distinctive beauty or peculiar grandeur: while throughout the whole are scattered numerous cities and fortresses on river-bank or ocean-shore, adorned with Hindoo and Moslem architecture, cave temples of wondrous workmanship, idolatrous shrines, and Mohammedan mausoleums, wrought with untiring industry and singular artistic skill; cyclopean walls, tanks, and ruins of extraordinary extent, and of unknown origin and date; but whose rare beauty even the ruthless destroyer, Time, has not wholly obliterated. These and many other peculiarities contribute to render India a land of romantic interest, which it is quite beyond the assigned limits of this work to depict: all within its scope‡ being a brief exposition of the various mountain-ranges and passes, the plateaux, the river system, coast-line, islands, &c., with an enumeration of the principal cities and towns, which are more numerous and populous than those of continental Europe.§

§ Autumnal tourists, in search of health, pleasure, or excitement, and weary of the beaten paths of the Seine and Rhine, might readily perform, in six months (September to March), the overland route to and from India,—examine the leading features of this ancient and far-famed land, judge for themselves of its gorgeous beauty, and form some idea of the manners and customs of its vast and varied population.

*Mountain Chains of India, their Extent, Position, Elevation, &c.*

Name.	Extent and Position of Extremities.	Elevation above the Sea.	Remarks.
HIMALAYA, or "abode of Snow."	This stupendous mass extends in an irregular curve over 22° of lon., from the defile above Cashmere, where the Indus penetrates into the plains of the Punjab, lon. 73° 23', to the S. bend of the Saupoo, lon. 95° 23'. It is 1,500 m. long, with an avg. breadth of 150 m.	1. Dairmal, 19,000 ft.; 2. Bal Tal, 19,650; 3. Ser and Mer, 20,000; 4. Hanle, 20,000; 5. Gya, 24,764; 6. Pongyal, 22,600; 7. Raldang, 20,103; 8. St. Patrick, 22,798; 9. St. George, 22,654; 10. The Pyramid, 21,579; 11. Garcontri, 22,906; 12. Jannoutri, 21,455; 13. Kedarnath, 23,062; 14. Badrinath, 22,951; 15. Kamet, 25,550; 16. Nanda Devi, 25,749; 17. Gurla, 23,900; 18. Dhawalagiri, 27,600; 19. Gonsainthan, 24,740; 20. Jumnoo, 25,311; 21. Kinchin-junga, 28,176; 22. Chomoni, 19,060; 23. Kanchen Jhow, 22,600; 24. Chumalari, 23,929; 25. Three peaks on lower bank of Decnree, 21,000; 26. Kaias, 22,000. Average elevation, 18,000 to 20,000 ft.	Limit of perpetual snow, or congelation, on S. slope, 15,000 to 18,000 ft. Deep narrow valleys, separated by ranges running either parallel or at right angles with the main ridge, contain the numerous sources of the rivers flowing into the Ganges, the Indus, and the Brahmapootra.* The steep face is towards the plain, and to the N. the chain supports the lofty table-land of Tibet. The greater part of the giant peaks, which rise to an elevation of 25,000 or 28,000 ft., are situate not on the central axis, but to the south of it. Viewed from Patna, at a distance of about 150 miles, these mountains present a long line of snow-white pinnacles, which, on a nearer approach, are seen towering above the dark line of lower but still lofty mountains.† With the exception of a strip of land at the foot of the mountains, the whole of Bootan presents a succession of the most lofty and rugged mountains on the surface of the globe. It is a series of ridges, separated only by the narrow beds of roaring torrents.
HINDOO-KOOSH, † Kouen-lin, or Mooz Tough.	About 850 m. long. From Kara korum, lat. 35° lon. 77°; to Bamian, † lat. 34° 50', lon. 67° 48'. †	1. Hindoo-Koosh, 35° 40', 68° 50', 21,000 ft.; 2. Summit N. of Jelalabad, 20,248; 3. Koushan Pass, 15,200; 4. Khawak Pass, 13,200; 5. Akrobat, 10,200 feet. Larum Mountains, 35° 20', 62° 54'; about 60 m. from N.E. to S.W., dividing the valley of Suwat from that of Panjikora; and Larassoor Mountains, S. of, and subordinate to, Hindoo-Koosh, about 90 m. from E. to W., 36', 70'—little known.	Limit of perpetual snow on S. slope (lat. 37°), 17,000 ft. The most remarkable feature of Hindoo-Koosh is, that to the S. it supports the plains of Kabool and Koh-Damaun, 6,000 to 7,000 ft.; while to the N. lies the low tract of Turkistan-Koondooz town, distant in a direct line 80 m. N. of Hindoo-Koosh, only 900 ft. above the sea. The Hindoo-Koosh is a distinct mountain system, its parallelism being from S.W. to N.E., while that of the Himalaya is from S.E. to N.W. **
KOH-I-BARA . . . . .	About 60 m.—along lat. 34° 30' between lon. 67° 30' and 68° 30'. At the S.W. extremity of Hindoo-Koosh, with which it is connected by the transverse ridges of Kalloo and Hajeguk.	Variously estimated. According to Burnes and Lady Sale, 18,000 ft.; Outram, 20,000 ft.; Humboldt, 2,800 toises, or 17,640 ft.; the most probable is 16,000 ft. Highest accessible point, 34° 40', 67° 30'; 13,200 ft. Hajeguk Pass, 11,700 ft.	It is a vast rounded mass, the culminating ridge ascending in lofty peaks, covered with perpetual snow, stretching as far as the eye can reach—further to the W. it sinks into the mazy mountains forming the Huzarch highlands. Supposed to be the Parapamisus of the Greeks.
SERRA-KOH, Snowy or White Mountains.	Near Attock, lon. 72° 16' W. nearly along the parallel of lat. 33° 50'; then sinking into a maze of hills stretching to the Kohistan of Kabool.	There are three ranges, running nearly parallel to the S. of the Kabool River; they rise in height as they recede from the river, the highest between 69° 40', and 70° 30', attaining an altitude of 14,000 ft.	Covered with perpetual snow. Generally of primary formation, consisting of granite, quartz, gneiss, mica-slate, and primary limestone. The Soorkh Kood, the Kara Su, and many other shallow but impetuous streams rush down its northern face, and are discharged into the Kabool river, which conveys their water to the Indus. The two lowest ranges are covered with pine forests; the highest and most distant has a very irregular outline, is steep and rocky, yet furrowed by many beautiful valleys.††
PUGHMAN, or Pamghan Range.	Subordinate to Hindoo-Koosh, running along its S. base, generally from N.E. to S.W.	Estimated at 13,000 ft. Oona Pass, 34° 23', 68° 15'; 11,320 ft. Erak Summit, 34° 40', 68° 48'; 12,480 ft.	Always covered with snow. Its south-eastern brow overhangs the delightful region of Koh-Damaun and Kabool; its northern face forms the southern boundary of the Ghorbund valley.



EXTENT, POSITION, AND ELEVATION OF MOUNTAINS—INDIA. 467

<p><b>KURKUTCHA MOUNTAINS.</b></p>	<p>Separate valley of Kabool from plain of Jelalabad; and connect Hindoo-Koosh with Sufted-Koh.</p>	<p>Length, about 50 m.; breadth, about 20 m. Between 33° 30' and 34° 20', and 71° 10' and 71° 30'. They connect Hindoo-Koosh with Sufted-Koh.</p>	<p>Four routes over this range; practicable only for a man and horse at Latabund Pass, 4,000 British troops were destroyed in their retreat, in 1842. Cold intense in winter, the frost splitting the rocks into huge shattered fragments. Appear at first irregularly grouped, but the distinct arrangement of a chain is afterwards observable. Four passes through this range. The hills generally consist of slate and primary limestone, with overlying sandstone.</p>
<p><b>KHYBER MOUNTAINS</b></p>	<p>Tafara summit, highest point, 4,800 ft. Summit of Khyber Pass, 3,373 ft.</p>	<p>Estimated at 13,000 ft.</p>	<p>Bounds the table-lands of Shawl and Pisheen on the W., as the Hala range does to the E. Country, though generally rugged, fertile.</p>
<p><b>GOOLKOO MOUNTAINS.</b></p>	<p>General elevation, about 8,000 ft. Highest part, 30° 50', 66° 30'; about 9,000 ft. Kojek Pass, 7,457 ft. General elevation, 9,000; above Pisheen, 3,500 ft. Tukatoo Hill, 30° 20', 66° 55'; 11,500 ft.</p>	<p>Supposed to equal those of W. Scinde, viz., 2,000 ft. Highest part, about 25° 30'. Steep—in few places less than 2,000 ft. . . . . Average height, probably below 2,000 ft. . . . .</p>	<p>In 25° 3', 66° 50', they are crossed by the Guncloba Pass, described as stony, and of easy ascent and descent. The road from Selwan to Kurrahee lies between them, and Keerat more to the W. Imperfectly explored.</p>
<p><b>AMRAN MOUNTAINS</b></p>	<p>Lat. 30° 50', lon. 69° 30'.</p>	<p>Length, 150 m. Between 30° 40' &amp; 32° 40', and 66° 40' and 68° 20'; extending N.E. from the N. side of Fischeen valley.</p>	<p>They are of recent formation, containing a vast profusion of marine exuvie. Huge fissures traverse this range, and hot springs and sulphurous exhalations are of frequent occurrence.</p>
<p><b>TOBA MOUNTAINS</b></p>	<p>Length, about 50 m. From C. Monze to lat. 26°.</p>	<p>60 to 70 m. S.W. from Sehwan to Dooba. Between 25° 32', 26° 20', and 67° 48', 68° 8'. Parallel with the Jutteel more to the W., between 25° 50', 26° 40', and about 67° 40'.</p>	<p>The range is crossed by the Bolan Pass, through which the route lies from Shikarpoor to Kandahar and Ghuznee, which though very important in a military point of view, is inferior in commercial interest to the Goolraice, farther N. E. face dips rather steeply to the Indus, but the W. declivity much more gradual, to the table-land of Sewestan. Sides of mountains clothed nearly to the summits with dense forests; valleys overgrown with a variety of indigenous trees, shrubs, and flowers.</p>
<p><b>SCINDE RANGES, VIZ.— I. JUTTEEL.</b></p>	<p>Length, about 50 m. From Jutteel, S.E. towards Hyderabad. Centre of range, 26° 67° 50'.</p>	<p>Length, about 400 m. From Tuktoo to Arabian Gulf, forming the E. wall of Beloochistan table-land.</p>	<p>Vegetation scanty, and the bold and bare precipices present a forbidding aspect. About 32° 50', 71° 40', the Indus makes its way down a narrow rocky channel, 350 yards broad; and the mountains have an abrupt descent to the river.</p>
<p><b>II. KEERTAR</b></p>	<p>Length, about 350 m. From 33° 40', they run nearly S. in the 70th merid. of lon., to the mountains about Hurund and Kahun, in lat. 29°.</p>	<p>Stretch from the E. base of Suliman Mountains to Jhelum River, N.E. to S.W., in lon. 32° 30', to 33° 30'. Length, 155 m., greatest breadth, 10 m. From Hurund war to Koopur, S.E. to N.W.</p>	<p>Hills consist of limestone, hornstone, and conglomerate. Notwithstanding its low latitude, Nepal, from its elevation, enjoys a climate resembling that of S. Europe. Snow lies on the mountain-chain which surrounds the capital, in winter, and occasionally falls in the valley. The whole is well-watered.</p>
<p><b>III. LUKKEE</b></p>	<p>Length, about 350 m. From 33° 40', they run nearly S. in the 70th merid. of lon., to the mountains about Hurund and Kahun, in lat. 29°.</p>	<p>From 3,000 to 3,500 ft.; highest part, 30° 17', 77° 50', between the Timli and Lal Derwaza Passes.</p>	<p>They are of recent formation, containing a vast profusion of marine exuvie. Huge fissures traverse this range, and hot springs and sulphurous exhalations are of frequent occurrence.</p>
<p><b>HALA, Drabootick, or Bolan Range.</b></p>	<p>Length, about 350 m. From 33° 40', they run nearly S. in the 70th merid. of lon., to the mountains about Hurund and Kahun, in lat. 29°.</p>	<p>Average height, 5,000 to 6,000 ft. Kurkleece Mountains, that part which borders on the Bolan Pass, from 29° 20' to 30° 10', 67° to 67° 30', where the crest of Bolan Pass intersects them, 5,793 ft. Highest elevation, Takht-i-Suliman, called also Khaissa-Ghar, lat. 31° 35'; 11,000 ft.</p>	<p>They are of recent formation, containing a vast profusion of marine exuvie. Huge fissures traverse this range, and hot springs and sulphurous exhalations are of frequent occurrence.</p>
<p><b>SULIMAN RANGE</b></p>	<p>Stretch from the E. base of Suliman Mountains to Jhelum River, N.E. to S.W., in lon. 32° 30', to 33° 30'. Length, 155 m., greatest breadth, 10 m. From Hurund war to Koopur, S.E. to N.W.</p>	<p>From 3,000 to 3,500 ft.; highest part, 30° 17', 77° 50', between the Timli and Lal Derwaza Passes.</p>	<p>They are of recent formation, containing a vast profusion of marine exuvie. Huge fissures traverse this range, and hot springs and sulphurous exhalations are of frequent occurrence.</p>
<p><b>KALA, or Salt Range</b></p>	<p>Stretch from the E. base of Suliman Mountains to Jhelum River, N.E. to S.W., in lon. 32° 30', to 33° 30'. Length, 155 m., greatest breadth, 10 m. From Hurund war to Koopur, S.E. to N.W.</p>	<p>From 3,000 to 3,500 ft.; highest part, 30° 17', 77° 50', between the Timli and Lal Derwaza Passes.</p>	<p>They are of recent formation, containing a vast profusion of marine exuvie. Huge fissures traverse this range, and hot springs and sulphurous exhalations are of frequent occurrence.</p>
<p><b>SEWALIK RANGE</b></p>	<p>Stretch from the E. base of Suliman Mountains to Jhelum River, N.E. to S.W., in lon. 32° 30', to 33° 30'. Length, 155 m., greatest breadth, 10 m. From Hurund war to Koopur, S.E. to N.W.</p>	<p>From 3,000 to 3,500 ft.; highest part, 30° 17', 77° 50', between the Timli and Lal Derwaza Passes.</p>	<p>They are of recent formation, containing a vast profusion of marine exuvie. Huge fissures traverse this range, and hot springs and sulphurous exhalations are of frequent occurrence.</p>
<p><b>NEPAUL MOUNTAINS, AND TABLE-LAND.</b></p>	<p>Stretch from the E. base of Suliman Mountains to Jhelum River, N.E. to S.W., in lon. 32° 30', to 33° 30'. Length, 155 m., greatest breadth, 10 m. From Hurund war to Koopur, S.E. to N.W.</p>	<p>From 3,000 to 3,500 ft.; highest part, 30° 17', 77° 50', between the Timli and Lal Derwaza Passes.</p>	<p>They are of recent formation, containing a vast profusion of marine exuvie. Huge fissures traverse this range, and hot springs and sulphurous exhalations are of frequent occurrence.</p>

Name.	Extent and Position of Extremities.	Elevation above the Sea.	Remarks.
ARAVULLI RANGE . . . . .	Length, 200 m.; average breadth, 10 to 15 m. Extend from 22° 40' to 26° 50', and from lon. 74° to 75°.	Average 3,000 ft. Highest elevation, Mt. Aboo, 5,000 ft. Crest of Koulmair Pass, 3,353 ft. Twelve m. from Bewar; country one mass of hills, intersected by small vales.	Forms the western buttress of the plateau of Central India. The mountains at Pokur are of a rose-coloured quartz, displaying bold pinnaces and abrupt rocky sides. The geological formation of Mt. Aboo is granitic.
KATTYWAR MOUNTAINS . . . . .	The peninsula lies between 20° 42', 23° 10', 69° 5', 72° 14'; area 19,850 sq. m.	The Gir, a succession of ridges and hills, some 1,000 ft.; elevation diminishing towards N. Girnar, a granitic peak, 3,500 ft. Palithana Mt., 1,500 ft. Group near Poor-bunder, 2,000 ft. Low ridge running from Choteyla to Gir, 400 ft. The centre of peninsula is the highest, and here all the rivers take their rise.	Caverns, deep ravines, and other fastnesses, very numerous in the Gir. The base of Girnar Mt. is clothed with jungle, diversified with black rocks, which appear through the vegetation. After this, the mount rises an immense bare and isolated granite rock, the face being quite black, with white streaks; and the N. and S. sides nearly perpendicular scarps.
VINDHYA CHAIN . . . . .	From Guzerat on the W. to the basin of the Ganges on the E.; and comprised between the 22nd and 25th parallels of latitude.	Avg. height 1,500 to 2,000 ft. Chumpancer, 22° 31', 73° 41'; 2,500 ft. Crest of Jam Ghaut, 2,300 ft. Mountain in Bhopal, 2,500 ft. Mahadeo Mountains, between 21° 30' 22' 40', 78° 80'; Doulaghere, said to be the highest; Am-barnaph, estimated at 2,500 ft. Chindawara, 2,100 ft.; and Patchmaree, vaguely stated to be 5,000 ft.; but this is probably an exaggeration; Dokgur, stated to be 4,800 ft.; Putra Sunka, and Choura Doo, the highest, conjectured at 5,000 ft. Amarkantak, a jungly table-land, computed to be 3,463 ft. Leela, a summit in Lanjhee hills, 21° 55', 80° 25'; 2,300 ft.; another of the same hills, in 21° 40', 80° 35', 2,400 ft. None more than 2,900 ft. Average between the Tara and Kuttra passes, about 520 ft. The Tara falls over the brow by a cascade of 200 ft.; Bilohi, 398 ft.; and Bouti, 400 ft.	The chain forms the southern buttress of the plateau of Malwa, Bhopal, &c. In the Sangor and Nerbudda territories, its crest is but the brow of this table-land; but in the western part, it rises a few hundred feet above the high land on its northern side. The passes that have been made over this range, are, for the most part, bad. The geological formations are the granitic and the sandstone, overlaid by trap rock.
BUNDELCUND RANGES, THREE, VIZ.—	Commence near Seoundah, lat. 26° 14', lon. 78° 50'; proceeds S. W. to Narwar, 25° 39', 77° 52'; S. E. to 24° 12'; N. E. to Ajegarth, 24° 53', 80° 20'; and Kalleenjur, in the same vicinity, and E. to Barghar, 25° 10', 81° 36'.	Average elevation between Kuttra Pass and Lohargaon, 1,050 ft. Elevation between Lohargaon and the foot of the hills near Patteriya, about 1,200 ft.	The lower parts are primary, overlaid by sandstone, in many places trap, or other formations of volcanic origin. The plateau, which surmounts the range, is from 10 to 12 m. wide.
II. PANNA . . . . .	Rises S. of the Bindyachal plateau.	Average elevation, 1,700; on some of its undulations, amounting to 2,000 ft.	Summit an undulating platform, about ten miles wide. Where deep ravines allow examination, an enormously thick bed of sandstone is found with primary rock superincumbent, itself overlaid by volcanic rocks.
III. BANDAUR . . . . .	Separated from the Panna range by the valley of Lohargaon, rising from a platform from 10 to 20 m. wide.	Of moderate elevation. Cluster on the W. of the Phalgu, hills on the E. of that river, a third near Shukpoora; 700 ft. Hills towards the S. probably twice that elevation. Rain-way sweeps round the eastern extremity of the range.	Generally of sandstone, intermixed with ferruginous gravel. The basin of Lohargaon is of lias limestone. The outer limit of this hilly tract is marked by abrupt isolated hills.
RAJMAHAL HILLS . . . . .	Rise about 20 m. S. of the Ganges; stretch S. and S. W. to the Vindhya range and the highlands of the Deccan. They terminate at the pass of Sikrigali.	Rugged and mountainous, from 500 to 600 ft. above adjoining table-land of Chota Nagpore.	In the E. the rock is of trap; in one place there is a conical hill, having at the top a cavity resembling the crater of an extinct volcano. A neighbouring hill sends forth smoke, luminous at night. In the W. and S. W. the rock is of quartz, or coarse jasper and flint, containing ore of iron and lead.
SIRGOOJAH MOUNTAINS . . . . .	Length, 90 m.; breadth, 85 m. Lie between 22° 34', 23° 54', 82° 40', 84° 6'.		Drained by the rivers Kunher and Rhera, with its feeder the Mohan, flowing in a direction generally northerly. These rivers are mostly shallow, except during the rains, when they become rapid torrents.

<p><b>PAOHETI HILLS</b> . . . . .</p>	<p>Length, 105 m.; breadth, 95 m. Lie between 22° 56', 23° 54', 85° 46', 87° 10'.</p>	<p>Imperfectly known. N. part described as marked by hills from 400 to 600 ft. About 23° 35', 85° 50', a mountain conjectured at from 2,500 to 3,000 ft. Near the centre of dist. some hills about 900 ft.</p>	<p>Formation generally primitive, of either granitic, gneiss, or sienite. Coal has been found near Jera, 23° 44', 86° 25'; and iron-ore exists at a short distance. The chain unites the N. extremities of the W. and E. Ghauts, and forms the base of the triangle on which rests the table-land of S. India. By the Moguls the country to the N. was called Hindoostan, and that to the S, the Deccan.</p>
<p><b>SAVTPOORA MOUNTAINS</b> . . . . .</p>	<p>Divides the Nerbudda from the Taptee valleys, extending from 21° and 22°, and 73° 40', to 78°, when it becomes confounded with the Vindhya.</p>	<p>Avg. elevation, supposed, 2,500 ft. Asseerghur hill-fort, 1,200 ft. They form the northern base of the Deccan table-land.</p>	<p>S. declivity towards Taptee abrupt; N. towards Nerbudda, gentle. They rise into peaks, or swell into forms denoting a primitive origin. They are volcanic.</p>
<p><b>WESTERN GHAUTS</b>, called by the natives <i>Syadree</i> in its N. part; and <i>Sikkhet</i> in its S. part.—<b>MALABAR COAST.</b></p>	<p>Length, about 800 m. From about 21° 15', to 73° 45', 74° 40', where they terminate almost precipitously, forming the N. side of the Gap of Palgatcheri.</p>	<p>Avg. height, 4,000 ft. About 21°; 2,000 ft. Mahabulishwur, 18° 73' 40'; 4,700 ft. Poorunder, 4,472 ft. Singhur, 4,162 ft. Hurreechundurghur, 3,894 ft. About 15°; 1,000 ft. Towards Coorg; Bonasson Hill, 7,000 ft. Tandianmole, 5,781 ft. Papagiri, 5,682 ft.</p>	<p>Seaward face though abrupt, not precipitous, but consists of a series of terraces or steps. Chasms or breaks in the range, give access to the highlands, and are denominated <i>ghauts</i> or passes, a name which has become generally applied to the range itself. The core is primary, inclosed by alternating strata of more recent origin. Scenery delightful and grand, displaying stupendous scarps, fearful chasms, numerous waterfalls, dense forests, and perennial verdure.</p>
<p><b>NEILGHERY GROUP</b> . . . . .</p>	<p>Length, about 50 m.; breadth, about 20 m.; area from 600 to 700 sq. m. Between 11° 10' and 11° 35', and 76° 30' and 77° 10'.</p>	<p>Elevation from 5,000 to 8,000 ft. Dodabetta, 8,760 ft. Kudlakad, 8,502 ft. Kundah, 8,353 ft. Durursolabeta, 8,380 ft. Beroyabeta, 8,488 ft. Murkurti, 8,402 ft. Ootacamund, lat. 10° 50'; 7,361 ft. General surface, an undulating table-land.</p>	<p>The foundation rocks are primary. Principal mineral, iron-ore. Neither calcareous nor stratified rocks, nor organic remains are found. So steep are the precipices, that in many parts, a stone dropped from the edge, will fall several thousand feet without striking anything. Neilgherries from "neil," bine, and "gherries," hills; blue hills.</p>
<p><b>PALGHAT GHAUTS</b> . . . . .</p>	<p>Length, about 200 m. From the Gap of Palgatcheri nearly to C. Comornin.</p>	<p>Elevation from 4,000 to 7,000 ft. A spacious table-land, 4,740 ft. A peaked summit, 6,000 ft. Another, 7,000 ft. Vurragherghur mts., 5,000 to 6,000 ft. Near C. Comornin, in the extreme S., 2,000 ft. Several, not measured.</p>	<p>The W. brow is, with little exception, abrupt; on the E. side the declivity is gradual. Such a conformation would seem to indicate a volcanic disturbance along the W. precipitous face.</p>
<p><b>EASTERN GHAUTS</b>, along <b>COROMANDEL COAST.</b></p>	<p>Length, about 1,000 m. From Balasore, S.W. to Ganjam; thence to Naggey, near Madras; where it joins the range which crosses the country in a north-easterly direction, from the W. Ghauts, N. of the Gap of Palgatcheri.</p>	<p>Average elevation, about 1,500 ft. Cauvery Chain, 4,000 ft. Condapilly, 1,700 ft. W. of Madras, estimated, 3,000 ft. Hills seen from the Mochalbandi, between Pt. Palmyras and Chikka Lake, appearing in irregular scattered groups, 300 to 1,200 ft.</p>	<p>Granite constitutes the basis of the range; and clay, hornblende, flinty and primitive slate, or crystalline limestone, forms the sides of the mountains; and the level country, as far N. as the Pennar, appears to consist of the debris, when the laterite formation covers a large surface. From the Kistnah, northward, the granite is often penetrated by trap and greenstone. To Vizagapatam and Ganjam sienite and gneiss predominate, occasionally covered by laterite.</p>
<p><b>ASSAM MOUNTAINS</b>, viz.—<b>I. NAGA HILLS</b></p>	<p>Length, about 250 m. On the S.E. border of Assam, stretches to the mountain-range forming the N.W. boundary of Burmah. Centre, about 26° 30', lon. 95°.</p>	<p>In the Khaiband range, supposed 4,000 ft. Some peaks are almost inaccessible.</p>	<p>The country is a wild unexplored tract. The measures adopted by the British government to restrain the outrages committed by the Nagus within British territory, have led to their submission.</p>
<p><b>II. DUPHALA, AND ABOR HILLS.</b></p>	<p>On the N.E. frontier of Bengal</p>	<p>From 5,000 to 6,000 ft. above the surrounding level.</p>	<p>The face of Assam presents an immense plain, studded with clumps of hills, rising abruptly from the general level. The mountains on the N. are composed generally of primitive rocks. Those to the S., of tertiary and metamorphic.</p>
<p><b>III. GARROW HILLS</b></p>	<p>Estimated at ca. 7,290 sq. m. Between 25° &amp; 26°, and 91° &amp; 92°.</p>	<p>A confused assemblage, from 1,000 to 6,000 ft. Estimated } Chirra Poonjee, 4,100 ft.</p>	<p>Character of country, wild. The rock formation is supposed to be chiefly of gneiss, or stratified granite.</p>
<p><b>IV. COSSVAH HILLS</b> . . . . .</p>	<p>On the N.E. frontier of Bengal</p>	<p>From 5,000 to 6,000 ft. above the surrounding level.</p>	<p>The face of Assam presents an immense plain, studded with clumps of hills, rising abruptly from the general level. The mountains on the N. are composed generally of primitive rocks. Those to the S., of tertiary and metamorphic.</p>

Name.	Extent and Position of Extremities.	Elevation above the Sea.	Remarks.
V. JYNTAII HILLS . . .	80 m. in length from N. to S., and 40 in breadth. Extends from lat. 21° 55', to 26° 7', and from lon. 91° 35', to 92° 48'.	About 16 m. on the Silhet side, and about the same on that of Assam, consists of low land interspersed with small hills. In the interior, about 50 m. in extent, is an undulating hilly table-land, from 1,500 to 2,500 feet high.	Coal is said to abound in the hills of Jynteah.
YOMMADOUNG, or Arracan Mountains.	Length, about 600 m. From Munnepoor, lat. 22° 20', to C. Negrais, lat. 16'.	Average height, 3,000 to 5,000 ft. Blue Mountain, 22° 37', 93° 11', 8,000 ft. Pyramid Hill, 3,000 ft. Crest of Aeng Pass, 4,517 ft. Pass from Podungmew to Kamree, 4,000 ft. From Blue Mountain there is a gradual slope to C. Negrais, where it is only about 300 ft.	It is a continuation of the great mountain chain commencing at the S. of Assam, in 26° 30', and extends S., running parallel with the river Irrawaddy, and forms a natural barrier between Arracan and Ava.
BURMAH MOUNTAINS . . .	Little known. . . .	From Promoe to Ava, characterised by unevenness and general elevation. Northwesterly, it is decidedly mountainous. Mountains 4 m. N. of Ava, 4,000 ft. Zingyat Mts., forming a kind of elevated doab between the Saluen and Sit-tang rivers.	Gold, silver, iron, tin, lead, antimony, and other metals, are met with. Quarries of marble are worked near Ummere-pooa. Coal has been discovered on the Irrawaddy.
TENASSERIM MOUNTAINS . .	Length, about 500 m., breadth nowhere exceeds 80 m. Area, 30,000 sq. m.	Siamese Mts., running N. to S. along Tenasserim provinces, 3,000 to 5,000 ft. Mountain: in Ye province, three parallel ridges, from 3,000 to 4,500 ft., gradually diminishing towards the coast, about 500 ft. Buffalo Mts., about 70 m. from Moulmein, 1,513 ft.	Coal of excellent quality has been discovered. Iron, tin, and gold are frequently met with.

\* The two sections of the Himalaya furnish points of resemblance, in presenting almost insurmountable obstacles to communication between the countries which they divide, thereby separating the Botis or people of Tibet from the Hindoo family of India. Major Cunningham considers the distinction of climate not less positively marked, both ranges forming the lines of demarcation between the cold and dry climate of Tibet, with its dearth of trees, and the warm and humid climate of India, with its luxuriance of vegetable productions. Some analogy, moreover, may be traced between the drainage systems of the two sections; the one separating the waters of the Saupoo from those of the Ganges and its affluents; and the other intervening between the Indus, flowing at its northern base, and the subsequent tributaries of that river rising on its southern slope.

† Any view of the Himalaya, especially at its northern base, and the subsequent tributaries of that river rising on its southern slope, over the forest-clad ranges during a greater part of the year, and the haziness of the dry atmosphere of the plains in the winter months. At the end of the rains, when the south-east monsoon has ceased to blow with constancy, views are obtained, sometimes from a distance of nearly 200 miles.

‡ It has often been observed, the Koh Kosh, or mountain of Kosh, offers a plausible etymology for the Caucasus of the classical writers. It is supposed by Ritter and Wilford to be that mentioned by Pliny, under the name of *Gracassas*, but slightly deviating from the Sanscrit *Gravakassus* (shining rock).

§ Iconartic for its mass and elevation. Viewed from the Koushan Pass, distant ten miles south, its appearance is very sublime. The outline is serrated, it being crowned by a succession of lofty peaks, with sides often perpendicular, and it is wrapped in a perpetual covering of snow, in all parts not too steep to admit its lying.

¶ All the series appear to diverge from the apex of the plain, expanding like the stalks of a fan.

‡ Humboldt regards it as the "most striking phenomenon amongst all the mountain-ranges of the old world." He considers that it may be traced from Taurus, in Asia Minor, across Persia, then, in the Huzarch mountains, to Hindoo-Koosh, which, with its numerous irregularities, it is not easy to believe could have been hollowed out by the water's force even of that great river by the depression down which the Indus flows, which, with its numerous irregularities, it is not easy to believe could have been hollowed out by the water's force even of that great river.

\*\* "The elevated expanse of Paneeer," to the north of Hindoo-Koosh, observes Humboldt, "is not only a radiating point in the hydrographical system of Central Asia, but is the focus from which originate its principal mountain chains, being common to India, China, and Turkestan; and from it, as from a central point, their several streams diverge." †† The country between Sufted-Koh and the outer ranges of Hindoo-Koosh. These plains are generally barren and stony, and have a slope from E. to W. The Khabool, which flows through them, has to make its way by narrow passages.

‡‡ Valley of Catmandoo, nearly of oval shape; length, N. to S., 12 m.; E. to W. about 10 m. Bounded on the N. and S. by stupendous mountains. To the E. and W. by others less lofty, the western end defined principally by a low steep ridge, called Naga-Arjoon, which passes close behind Sumbloo-Nath, and is backed by a more considerable one named Dhoonhouk. To the eastward, the most remarkable hills are those of Ranichouk and Mahabut, but they do not reach the elevation of Phalehouk (the highest on the south), or of Sheepoori, which is by far the highest mountain. The bottom of the valley is uneven, intersected by deep ravines, and dotted throughout with little hills.

§§ The number of peaks which crown this mountain is variously stated. According to Tod, there are six, the most elevated of which is that of Gorucknath, having on its summit an area of only ten feet in diameter, and surrounded by a shrine dedicated to Gorucknath; each of the other peaks has its shrine. On a small table-land on the mountain, about 600 feet below its summit is the ancient palace of Kheugar, and numerous Jain temples.

||| Ascent from Indore (1,998 feet), gradual; descent, to the Nerbudda, steep and abrupt

*Mountain Passes on the Indian Frontiers, from the Indus to the Irawaddy—so far as known.*

Name and Position.	Lat. and Lon. of Extremities; Length and Breadth.	Heights, in Feet.	Remarks.
MOOLA or GUNDAVA—CUTCH GUNDAVA.	Lat. 28° 10', lon. 66° 12'; lat. 28° 24', lon. 67° 27'—About 100 m. Open spaces, connected by defiles.	Bapow, 5,250 ft.; Peesee Bhent, 4,600; Nurd, 2,850; Bent-i-Jah, 1,850; Kullar, 750 ft.	Descent, 4,650 ft., average 46 ft. per m. Water abundant. Practicable for artillery.* Average ascent, 90 ft. per m.† Ditto.
BOLAN—BELOUCHISTAN.	Lat. 29° 30', lon. 67° 40'; lat. 29° 52', lon. 67° 4'—55 m.; ½ m. wide at entrance.	Entrance, 800 ft.; Ab-i-goom, 2,540; crest, 5,733 ft.	Winding course.‡
GOMUL or GOOLAIRREE—DE-RAJAT.	Lat. 32°, lon. 70° 30'—About 100 m.	20 m. from entrance road N. W., then 80 m. S. W., then N. W. to Ghuznac.	Rises gradually from the E., but has a steep declivity westward.§
KHYBER—PESHAWUR.	Lat. 33° 58', lon. 71° 30'—About 83 m.	Crest, 3,373 ft. Ali Musjid, 2,433 ft.	Only known route over Hindoo-Koosh for artillery or wheeled carriages.¶
BAMIAN—AFGHANISTAN.	Lat. 34° 50', lon. 67° 48'—About 1 m. wide, bounded by nearly perpendicular steeps.	Bamian, 8,496 ft., over a succession of ridges from 8,000 to 15,000 ft.	Road rocky and uneven; descent, 200 ft. per m. Three entrances.¶
KOTSHAN—HINDOO-KOOSH.	Hindoo-Koosh peak—About 40 m.; narrow.	Crest, 15,000 ft.	Ascent on N. side, an uniformly inclined plane.**
KHAWAK—HINDOO-KOOSH.	Lat. 35° 38', lon. 70°—About 15 m.	Crest, 13,200 ft.	Only pass into Cashmere practicable for an army.
BUL TUL or SIHUR-JI-LA—CASHMERE.	Lat. 34° 10', lon. 75° 15'.	Crest, 10,500 ft.	
BARAKULA—CASHMERE.	Lat. 34° 10', lon. 74° 30'.		
BARA LACHA—TIBET.	Lat. 32° 44', lon. 77° 31'.		
ROTANG—HIMALAYA.	Lat. 32° 25', lon. 77° 12'.		
MANERUNG—HIMALAYA.	Lat. 31° 56', lon. 78° 24'.		
CHARUNG—HIMALAYA.	Lat. 31° 24', lon. 78° 35'.		
BURENDA—HIMALAYA.	Lat. 31° 23', lon. 78° 12'—Length of crest, 50 paces.		
BULCHA—KUMAON.	Lat. 30° 28', lon. 80° 14'.		
NIRI—KUMAON.	Lat. 30° 57', lon. 79° 54'.		
KAMPACHEN—NEPAUL.	Lat. 27° 38', lon. 88°.		
CHOONFERMA—NEPAUL.	Lat. 27° 33', lon. 88° 1'.		
WALLACHOON—NEPAUL.	Lat. 27° 52', lon. 87° 14'.		
TUNKRA—SIKKIM.	Lat. 27° 38', lon. 88° 56'.		
DONKIA—SIKKIM.	Lat. 27° 56', lon. 88° 48'.		
AENG—ARRACAN.	Lat. 19° 49', lon. 94° 9'—34 miles.		
MYHEE—ARRACAN.	Lat. 19° 14', lon. 94° 30'.		

\* In 1839, the Anglo-Indian detachment marched through it. It is preferable to the Bolan Pass in a military point of view.  
 † A continuous succession of ravines and gorges. The air in the lower part of the pass is in summer oppressively hot and unhealthy.  
 ‡ Of great commercial importance. Every spring, large caravans traverse it from Hindoostan to Afghanistan.  
 § Called the Key of Afghanistan. At Ali-Musjid, merely the bed of a rivulet, with precipices rising on each side at an angle of 70°. Near Lamdee Khana, a gallery 12 ft. wide; on one side a perpendicular wall, and on the other a deep precipice. It was twice forced by the British.  
 ¶ The great commercial route from Kabul to Turkestan; the several passes to the eastward are less frequented on account of their difficulty and their elevation.  
 \*\* Most frequented east of Bamian; impassable for wheeled carriages.  
 †† Scarcely frequented, yet may be considered the most practicable. Tamerlane crossed it on his march into Hindoostan.  
 ††† Passes over the Outer Himalaya range.—Sucla, 31° 13' lat., 78° 29' lon.—elevation, 16,000 ft.; Kimlia, 31° 15', 78° 25', 17,000; Siaga, 31° 16', 78° 20', 16,000; Marga, 31° 16', 78° 21', 16,000; Lumbin, 31° 16', 78° 20', 16,000; Barga, 31° 16', 78° 19', 15,000; Nulgun, 31° 19', 78° 13', 14,891; Rupin, 31° 2', 78° 10', 15,480; Ghusul, 31° 21', 78° 8', 15,851; Nibrung, 31° 22', 78° 10', 16,035; Gumas, 31° 21', 78° 8', 16,020; Yusu, 31° 24', 78° 4', 15,877; Sundru, 31° 24', 78° 2', 16,000; Shatul, 31° 25' lat., 77° 58' lon., 15,555 ft. In Koonawur there are fifteen passes, at elevations varying from 15,000 to 17,000 ft.  
 ††† Considered the best pass between Kumaon and Tibet, and is one of the principal channels of trade between Chinese Tartary and Hindoostan.  
 †††† Ascended by Dr. Hooker, December, 1848. The distance to which the voice was carried was very remarkable: he could hear distinctly every word spoken at from 300 to 400 yards off.  
 ††††† Considerable trade carried on over this pass between Ava and Arracan.

472 RIVERS OF INDIA—SOURCE, COURSE, DISCHARGE, AND LENGTH.

Rivers of British India—their Source, Course, Discharge, and Length; Tributaries or Confluents; and estimated area, in sq. m., drained; and large Tributaries, having their outlet in the Sea; and Forty-nine Main Streams, having their outlet in the Sea; and estimated area, in sq. m., drained; and large Tributaries, having their outlet in other Rivers.

Name.	Source, Course, Discharge, and Length.	Tributaries, and their Length in British Miles; and Area drained.	Remarks.
1 GANGES.—BHAGERUTTEE at its source, and PODDA near the sea.	Gangoutri, Himalaya, 1,400 ft. above the level of the sea. N.W. to Johnoi; W. and S.W., 13 m.; S.W., 36 m.; S., 15 m.; S.E., 39 m.; S., 8 m.; W., 24 m.; S.W., 15 m.; S., 130 m.; S.E. to Allahabad, E., 270 m.; E. to Shikigalee; S.E. remainder of course into Bay of Bengal, by numerous mouths. The Ganges gives off some of its waters to form the Hooghly, and also anastomoses with the Megna.—Length, 1,514 m.	Jumna, 860; Ghogra, 606; Gunduck, 450; Goomtee, 482; Sone, 465; Coosy, 325; Kam-gunga, 373; Mahananda, 240; Karumnassa, 140; Koniae or Jamuna, 130; Aluknunda, 80; Bhilung, 50 m.—398,000 sq. m. drained, exclusive of Hooghly.	Navigable for river craft as far as Hurdwar, 1,100 m.; steamers ply as far as Gurmuk-teesur, 393 miles above Allahabad, distant from Calcutta <i>via</i> Delhi, 930 miles; at Cawn-poor, 140 m. above Allahabad, the navigation is plicated with great activity. The breadth of the Ganges at Benares varies from 1,500 to 3,000 ft. Mean discharge of water there, throughout the year, 250,000 cub. ft. per second. Formerly navigable for a line-of-battle ship to Chandernagore; now, vessels drawing more than 17 ft., not safe in passing from Calcutta to the sea, by reason of shoals.
2. HOOGHLY	Formed by junction of Bhageruttee and Tellinghee, two branches of Ganges. S. to Calcutta; S.W. to Diamond Harbour; E. and S.W. into the sea at Sangor roadstead, by an estuary 15 m. wide.—Length, 160 m., by winding of stream.	Dammoadah, 350; Dalkissore, 170; Coosy, 240; Mor, 130.—About 49,000 sq. m. drained.	Formerly navigable for a line-of-battle ship to Chandernagore; now, vessels drawing more than 17 ft., not safe in passing from Calcutta to the sea, by reason of shoals.
3. INDUS, or NILAB ("blue-river.")	Tibet, behind Kailas range, to the N. of Kailas peak, 22,000 ft. above the sea. N.W. to Dras R.; more northerly to Shy-yok; W.N.W., 115 m. to Makpon-i-Shagaron; S.S.W. and S. to Attock; a little W. of S. to confluence with Punjind; S.W. to Khyrpoor; S. to Schwan; S.E. to Hyderabad; W. of S. to Arabian Sea, Indian Ocean.—Length, 1,800 m.	Eekung-Choo, 110; Hanic, 70; Zanskar, 150; Dras, 75; Shy-yok, 300; Shy-gbur, 70; Ghilgit; Cabool, 320; Sulei, 850; Chenab, 765; Jhelum, 490; Ravee, 450; Punjind, 60 m.—About 390,000 sq. m. drained.	Navigable to Attock, 942 m. from sea, there from 500 to 800 ft. wide; depth, 60 ft. Breadth and depth varies much after junction with Punjind; breadth, 1 to 30 m.; depth, 12 to 186 ft.
4. BRAHMAPOOTRA—MEGNA, near the sea.	N.E. extremity of Himalaya range; lat. 28° 30', lon. 97° 20'. S.W., 63 m.; W.—S.W.—S.E.—S.W., and E. to Bay of Bengal, through three mouths, Hatia, Ganges, and Shebapoor.—Length, 933 m.	Sanpoo, 1,000; Dibong, 140; Noh-Dihong, 100; Borce Dehing, 150; Soobu-Sheerce, 180; Monas, 189; Bagnee, 150; Guddala, 160; Durlah, 148; Teesta, 313; Barak, 200; Goomtee, 140 m. In lat. 25° 10', lon. 89° 43', it gives off the Koniae.—305,000 sq. m. drained.	The branches of the Brahmapootra, together with those of the Ganges, intersect the territory of Bengal in such a variety of directions, as to form a complete system of inland navigation.
5. IRAWADDY	E. extremity of Himalaya, lat. 28° 5', lon. 97° 58'. Nearly N. to S. through Burmah, and the recently acquired British territory of Pegu; into the Bay of Bengal, by numerous mouths.—Length, 1,060 m.	Khyendwen, 470; Shwely, 180; Moo, 125 m.—161,000 sq. m. drained.	The Bassein branch affords a passage for the largest ships for 60 miles from its mouth. No river of similar magnitude, it is stated, presents so few obstructions.
6. GODAVERY	E. declivity of W. Ghauts, near Nassik, 3,000 ft. above the sea. S.E., 200 m.; E., 100 m.; S.E., 85 m.; E., 170 m.; S.E., 200 m.; into Bay of Bengal, by three mouths.—Length, 898 m.	Wein-Gunga, 439; Manjera, 330; Poorna, 160; Paira, 103; Indraotee, 140 m.—130,000 sq. m. drained.	In 1846, the sanction of the Court of Directors of E. I. C. was given to the construction, at an expenso of £47,500, of a dam of sufficient height to command the delta, and to supply the rich alluvial soil of which that tract is composed, with the means of constant irrigation. The experiment of navigating the Godavery by steam, has been entertained by the Madras government, and means for carrying it into effect are under consideration.

N.B.—Where no tributaries or area drained are mentioned, it is because, as regards the former, there are none of note; and the other is small, and imperfectly defined.

7. KISTNAH, or KRISHNA	The Kistnah, in consequence of the rapid declivity of its waterway and rockiness of its channel, cannot be navigated by small craft, even for short distances. An extensive system of irrigation, in connection with this river, is now in progress, and has been estimated to cost £150,000.	Beemah, 510; Toongabudra, 325; Gutpurba, 160; Mulpurba, 160; Warna, 80; Dindee, 110; Peedda Wag, 70 m.—110,000 sq. m. drained.	The river, notwithstanding the great width of its bed in some parts of its upper course, appears to be scarcely anywhere continuously navigable for any considerable distance, in consequence of the innumerable basaltic rocks scattered over its channel.
8. NERBUDDA . . . . .	Amarkantak, a jungly table-land, lat. 22° 39', lon. 81° 49'; from 3,500 to 5,000 ft. above the sea. Nearly due W., with occasional windings, to Gulf of Cambay, by a wide estuary.—Length, 801 m.	Herrun; Samarsee, 60; Suktha, 70 m.—About 60,000 sq. m. drained.	Bed full of micaceous quartzose rock; banks low, and little above the surrounding level.
9. LOONEE . . . . .	Aravalli Mts., near Pokur, lat. 26° 37', lon. 74° 46'. S.W., nearly parallel with Aravalli range, into Runn of Cutch, by two mouths, principal in lat. 24° 42', lon. 71° 11'.—Length, 320 m.	Rairee, 88; Sokree, 130 m.—About 19,000 sq. m. drained.	
10. BUNNAS . . . . .	In a cluster of summits in the Aravalli range, lat. 24° 47', lon. 73° 28'. S.W., into Runn of Cutch, by several small channels.—Length, 180 m.	About 17,000 sq. m. drained.	
11. BHADER . . . . .	Kattywar, lat. 22° 10', lon. 71° 18'. S.W., into Indian Ocean, near Poorbunder, lat. 21° 38', lon. 69° 46'.—Length, 185 m.		
12. OOYAL . . . . .	Kattywar, lat. 21° 31', lon. 70° 50'. Circuitous, but generally W., into backwater, behind Poorbunder.—Length, 75 m.		
13. AJEE . . . . .	Kattywar, lat. 22° 10', lon. 76° 31'. N.W., into Gulf of Cutch.—Length, 60 m.		
14. SETROONJEE . . . . .	Kattywar, lat. 21° 15', lon. 70° 25'. E., into Gulf of Cambay.—Length, 60 m.		
15. GEYLA . . . . .	Kattywar, lat. 22° lon. 71° 20'. E., into Gulf of Cambay.—Length, 60 m.		
16. GOOMA . . . . .	Kattywar, lat. 22° 18', lon. 71° 30'. E., into Gulf of Cambay.—Length, 88 m.		
17. TAPTEE . . . . .	Saupoora Mts., near Mooltae, lat. 21° 46', lon. 78° 21'. Generally W., to Gulf of Cambay.—Length, 441 m.	Poorna, 160; Gimra, 160; Boree, 90; Panjar, 92 m.—About 25,000 sq. m. drained.	The surface of Kattywar peninsula is generally undulating, with low ridges of hills, running in irregular directions. The land in the middle, part is the highest, and here all the rivers take their rise, disembling themselves respectively into the Runn and Gulf of Cutch, and Gulf of Cambay.
18. MYHE, or MAHEH . . . . .	Vindhya Mts., lat. 22° 32', lon. 75° 5'; 1,850 ft. above the sea. N.W., 145 m.; W. 25 m.; S.W., 180 m., into Gulf of Cambay.—Length, 350 m.	Amass, 90; Manchun, 55 m. . . . .	It can scarcely be deemed a navigable stream, as at Surat, 17 m. from its mouth, it is fordable when the tide is out. It is said to be navigable in the dry season for boats of light draught, through Candesh. The mouth is obstructed by numerous sands and a bar. Navigable for 15 m. from its mouth. At 50 m. up, 100 yds. wide; bed, 400 yds.; depth, 1 ft.
19. WASHISHEE . . . . .	W. Ghauts, lat. 17° 50', lon. 73° 36'. S.—W.—S.E.—W., into Indian Ocean.—Length 55 m.		
20. SAVITREE . . . . .	W. Ghauts, lat. 18° 17', lon. 73° 27'. S.E.—W., into Indian Ocean.—Length, 70 m.		
21. TAUNSA . . . . .	W. Ghauts, lat. 19° 41', lon. 73° 29'. S.W.—W.—W.S.W.—W., into Indian Ocean.—Length, 58 m.		
22. SOORLA . . . . .	W. Ghauts, lat. 19° 54', lon. 73° 24'. W.—S., into Indian Ocean.—Length, 68 m.		
23. DAMGUNGA . . . . .	W. Ghauts, lat. 20° 11', lon. 73° 42'. W.—N.—W.N.W., into Indian Ocean.—Length, 58 m.		
24. PAR . . . . .	W. Ghauts, lat. 20° 30', lon. 73° 43'. W., into Indian Ocean.—Length, 50 m.		

Western side of India.

No tributaries of note; area drained small, and imperfectly defined.

474 RIVERS OF INDIA—SOURCE, COURSE, DISCHARGE, AND LENGTH.

Name.	Source, Course, Discharge, and Length.	Tributaries, and their Length in British Miles; and Area drained.	Remarks.
25. EEB . . . . .	W. Ghauts, lat 20° 50', lon. 73° 42'. W., into Indian Ocean.—Length, 70 m.	No tributaries of any extent; and area drained imperfectly.	Nothing worthy note.
26. POORNA . . . . .	W. Ghauts, lat. 20° 59', lon. 73° 44'. W., into the Indian Ocean.—Length, 60 m.		Navigated by the largest patimars for 20 m. from Mullappoor to Shedshegur, rendered easy by uniformity of channel.
27. GUNGAVALLY . . . . .	Plain of Dharwar, lat. 15° 45', lon. 75° 10'. S.—S.W., into Indian Ocean.—Length, 100 m.		Navigable for canoes as far as Palghat, 63 m. from the sea.
28. CAULY NUDDEE . . . . .	Plain of Dharwar, lat. 15° 33', lon. 74° 47'. S., 61 m.; W., 30 m., into Indian Ocean.—Length, 91 m.		The large anicuts upon it are Conoor, diverting a stream of same name, Parca Anal, & Chittanaik.
29. PONANY . . . . .	Coimbatore, lat. 10° 19', lon. 77° 6'. N.W.—W., into Indian Ocean.—Length, 128 m.		
30. VYGAH . . . . .	Madura, lat. 10° 17', lon. 77° 37'. S.E., into Bay of Bengal.—Length, 180 m.		
31. VELLAUR . . . . .	Base of E. Ghauts, lat. 10° 28', lon. 78° 21'. E., into Gulf of Mannaar.—Length, 80 m.	Magunmurchy, 40; Bhovani, 120; Noyel, 92 m.; Hennaivutti; Leechman-Tect; Cub-bany; Shimaska; Arkavati; Ambrawutti.—About 36,000 sq. m. drained.	Navigable for craft through the low country during the inundation. Gangan Zooka fall, 370 ft. Burr Zooka, 460 ft.
32. GOONDAH . . . . .	Vellamudhee hills, Madura. S.E., into Gulf of Mannaar.—Length, 95 m.		The river is small at its mouth, and admits only coasting craft.
33. CAUVERY . . . . .	Coorg, lat. 12° 25', lon. 75° 31'. E, 83 m.; N.E., 28 m.; S.E., 95 m.; N.E.—E.—S.E., 47 m.; S., 47 m.; S.E.—E.—N.E., into Bay of Bengal. Length, 472 m.	Pony, 40; Sheyaroo, 90 m. . . . .	The entrance of the Palar, near Sadras, is contracted by a bar or narrow ridge of sand, inside of which the river becomes of considerable width.
34. VELLAUR . . . . .	Base of E. Ghauts. E., into Bay of Bengal, near Porto Novo.		
35. PALAR . . . . .	Mysoor table-land, lat. 13° 20', lon. 78° 2'. S.E., 55 m.; E., 87 m.; S.E., 48 m., into Bay of Bengal.—Length, about 220 m.	Chittravutti, 107; Paupugnee, 130; Chittair, 75 m.	
36. SOORNAMOOKY . . . . .	Mysoor table-land, lat. 13° 23', lon. 79° 11'. N.E., to Bay of Bengal.—Length, 99 m.		Gold is found in its sands, in its passage through the Carnatic.
37. PENNAR—(N.) . . . . .	Nundidroog table-land, lat. 13° 23', lon. 77° 43'. N.W., 30 m.; N., 95 m.; E., 230 m., into Bay of Bengal.—Length, 355 m.		
38. PENNAR—(S.) . . . . .	N. of Nundidroog table-land, lat. 13° 32', lon. 77° 45'. S. to Mootanahalli, 55 m.; S.E., 190 m., into Bay of Bengal, a mile N. of Ft. St. David.—Length, 245 m.		
39. GUNDLACAMA . . . . .	Lat. 15° 40', lon. 78° 49'. Very circuitous; E.—N.E.—S.S.E.—S.E., into Bay of Nizampannam.—Length, 155 m.		
40. BONDSORA . . . . .	Table-land of Orissa, lat. 19° 39', lon. 83° 27'. S., into Bay of Bengal.—Length, 130 m.	Hutsoo, 130; Aurag, 117; Tell, 130; Bang Nuddee, 60 m.—About 46,000 sq. m. drained.	From July to February, navigable for boats for 460 m.
41. LAIAGLAH . . . . .	Table-land of Orissa, near source of Bondsora. S., into Bay of Bengal.—Length, 133 m.		
42. MAHANUDDY . . . . .	Native state of Nowarudda, lat. 20° 20', lon. 82° W., 30 m.; N.E., 110 m.; S.E., 300 m., to Bay of Bengal by numerous mouths.—Length, 520 m.		
43. BRAHMINY . . . . .	Palamow table-land, lat. 23° 25', lon. 84° 13'. S.—E.—S.E., into Bay of Bengal, near Ft. Palmyras.—Length, 410 m.	Sunk, 65 m.—About 26,000 sq. m. arc drained by Brahminy and Byturnee.	Sacred in the Hindoo mythology, more especially at its source.
44. BYTURNEE . . . . .	Near Lohardugga, lat. 23° 29', lon. 84° 55'. N.—E.—S.—S.W.—S.E.—E., into Bay of Bengal, by Dhumrah river.—Length, 345 m.		

Western India.

Eastern side of India.



45. SOOBUNREEKA (En. India)	Chota Nagpoor table-land. N.E.—E.—S.E.—S.—S.—E.—E.—S.E.—S., into Bay of Bengal.—Length, 280 m.	Karow, 80 m.—About 12,000 sq. m. drained.	Navigable within a few miles of Arracan town, for ships of 250 tons burden. 90 m. above Akyab, the stream is narrow, and navigable only for canoes. 10 m. broad at its mouth. It is a navigable river. For about 190 m. forms the boundary between the Tenasserim provinces and Pegu.
46. ARRACAN, or COLA-DYNE.	Burmah, lat. 21° 40'. lon. 96° 50'. S., into Gulf of Martaban.—Length, 420 m.	Myoo; Lemyo.	It enters the British dominions about lat. 18° 40'.
47. SITANG . . . . .	N. of Yunnan province, China; about lat. 27° 10'. lon. 98° 57'. S., into Gulf of Martaban, by two mouths, formed by Pelewgeen Island.—Length, 430 m.	Yennan, 115; Saar, 120 m.	Upper part of course through a wild and uncultivated tract, sometimes between high and perpendicular banks. It afterwards opens on extensive plains. On many parts of its banks exist forests of fine teak, and the valuable sapan wood.
48. SALVEN, or SALWEEN	Supposed to lie in the mountains to the N.E. of Tavoy, between the 14th and 15th parallel of latitude. S to Metamo, lat. 14° 13'; S.E. and S. to Tenasserim town; N.W. into Bay of Bengal, by two mouths.—Length, 270 m.	Attaran or Weingo, 110; Thoung-yin Myit, 225; Meloun, 90 m.	In consequence of its bed being obstructed by shoals and rocks, navigation is not practicable for craft above Delhi, except by means of the canal. Its banks are lofty and precipitous, and ridges of rock in many places advance into the stream, combining with its general shallowness and strong current to render navigation extremely difficult and dangerous.
49. TENASSERIM . . . . .	Jumna, tributary to GANGES	Baing-Khiaung; Little Tenasserim; Kamaun Khiaung.	Butter describes it as navigable for the largest class of boats in all seasons.
	JUMNA, tributary to GANGES	Toise or Supin, about 100; Hindan, about 160; Hansoutee, 99; Banguanga, 220; Chumbul, 570; Sinde, 260; Betwa, 360; Cane, 230; Baghin Nuddee, 90; Seyngur, 210; Urrund Nuddee, 245 m.—About 105,000 sq. m. drained	In the rainy season, boats of 1,000 or 1,200 maunds (40 tons) burthen, are sometimes seen proceeding to Lucknow.
	GHOGRA, tributary to GANGES	Raptee, 134; Kurnalli, 225; Bhyrvee, 70; Dhauli, 45; Gorunganga, 60 m.—About 49,000 sq. m. drained.	The navigation of the river is not considered available for purposes of important utility higher than Daudhagur, 60 m. from the confluence with the Ganges.
	GOOMTEE, tributary to GANGES	Koel, 140; Kunher, 130; Johila, 100 m.—Including the Phalgu and other rivers falling into the Ganges above Rajmahal, about 42,000 sq. m. drained.	Though navigable continuously through its whole course downwards from Bhelaunji, there are in the part of its channel nearer that place many rapids and passes, where, the course being obstructed by rocks, navigation becomes difficult and dangerous.
	SONE, tributary to GANGES	Trisula-gunga, 100; Marachangdi, 100; Naling, 110 m.—About 40,000 sq. m. drained.	It does not appear to be used for navigation, which is probably incompatible with the average declivity of its bed (2 ft. 5 in. per m.), and still more so with the general rugged and rocky character of its channel. Its average volume of water is so considerable, that on its junction it has been known to raise the united stream 7 or 8 ft. in 12 hours.
	GUNDUCK, tributary to GANGES	Chumbela, 70; Seepra, 120; Parbatty, 220; Kallee Sind, 225; Banas, 320; Chota Kallee Sind, 104 m.—About 50,000 sq. m. drained.	
	CHUMBUL, tributary to JUMNA		

Name.	Source, Course, Discharge, and Length.	Tributaries, and their Length in British Miles; and Area drained.	Remarks.
RAMGUNGA, tributary to GANGES.	Kumaon, lat. 30° 6', lon. 79° 20'; about 7,144 ft. above the sea. S.E., 20 m.; S.W., 70 m.; S. to Moradabad—S.E.—S., into Ganges.—Length, 373 m.	Kosee, 150; Gurra, 240 m.	Fordable at Moradabad, at 15 m. below confluence with Kosee; but not usually fordable below Jellalabad.
Coosy, tributary to GANGES.	Himalaya Mountains, lat. 28° 25', lon. 86° 11'. S.W.—S.E.—S.—E.—S.E.—S., into Ganges.—Length, 325 m.	Arun, 310; Tambur, 95; Gogaree, 235; Dud Coosy, 50; Tiljuga, 40 m.—46,000 sq. m. dr.	Where narrowest, and when lowest, stream 1,200 ft. wide and 15 ft. deep. It is larger than the Jamma or the Ghogra.
MAHANANDA, tributary to GANGES.	Near Darjeeling, in the Sikhim hills, lat. 26° 57', lon. 88° 20'. S., 40 m.; S.W., 60 m.; S.E., 50 m.; S., 20 m. S.E., 40 m.; S., 30 m.—Length, 240 m.	Sani, Beher, Mahana, Belun, and Seoti.—In-	Navigable during the dry season for craft of 8 tons as far as Kishengunge; for those of much larger burthen during the rains.
KARUMNASSA, tributary to GANGES.	In the Kymore range, lat. 24° 38', lon. 83° 11'. N.—N.W., into the Ganges, near Ghazeepeer.—Length, 140 m.	cluding small streams, 13,000 sq. m. drained. Doulee, 35; Vishnugaanga, 25; Mundakni, 32; Pindur, 60 m.	At confluence with Bhageeruttee, 142 ft. broad; rises 46 ft. during the melting of the snow. Between 60 and 70 ft. wide in the beginning of May, 5 m. from its mouth.
TONS, tributary to GANGES.	Lat. 24°, lon. 80° 30'. N.W.—E.N.E.—N., into the Ganges, a few miles below Allahabad.—Length, 165 m.	Barraichur, 155 m.	Crossed by a ferry, 50 m. above its mouth. At Rancegunj, 135 m. from mouth, 500 yds. wide, fordable, with a rapid current about 1 ft. deep in December.
ALUKNUNDA, tributary to GANGES.	Lat. 30° 33', lon. 79° 33'. N.W.—S.W.—S.W., into the Bhageeruttee, at Deoprayag.—Length, 86 m.	Comaree.	It is crossed at Amecnagur, 80 m. from source, & at Kollighat, 40 m. from mouth, by fords during the dry season, and ferries during the rains.
BULLING, tributary to GANGES.	Lat. 30° 45', lon. 75° 53'. S.W., into the Bhageeruttee.—Length, 50 m.	Chang-Chenmo, 58; Nubra, 66 m.	Crossed at Bancoora, 50 m. from source, and at Jahanabad, by means of fords.
DAMMOODAI, tributary to HOOGHLY.	Ranghur district, lat. 23° 55', lon. 84° 53'. E. and S.E., to Burdwan; S., to Diamond Harbour.—Length, 350 m.	Punchshir, 120; Tagao, 80; Alishang, 120. Soorih-Rood, 70; Kooner, 230; Suwat, 150 m.—About 42,000 sq. m. drained.	Not navigable along the N. base of Khyber Mts. except on rafts and hides. Navigable for boats of 40 or 50 tons to Dobbundee.
Coosy, tributary to HOOGHLY.	Near Kara-korum Pass. S.E.—N.W., into Indus, near Iskardo.—Length, 300 m.	Trarap, 42; Zingehan-Tokpo, 22 m.	At Roopur, 30 ft. deep, and more than 500 yds. wide. Navigable as far as Filoor in all seasons, for vessels of 10 or 12 tons burthen.
DALKISSORE, tributary to HOOGHLY.	Pacheco district, lat. 23° 30', lon. 86° 34'. S.E.—S.—S.E., into Hooghly at Diamond Harbour.—Length, 170 m.	Spiti, 120; Buspa, 52; Beas, 290 m.—About 29,000 sq. m. or, including Ghara and Beas, about 65,000 sq. m. drained.	Becomes navigable for timber-rafts at Aknur. Descends at the average rate of 40 ft. per m. for the first 200 m. Estimated elevation at Kishitwar, 5,000 ft.
SHY-YOK, tributary to INDUS.	Near Kara-korum Pass. S.E.—N.W., into Indus, near Iskardo.—Length, 300 m.	Parbati; Sainji, 38; Gomati, 55 m.; Ul; Gaj.—About 10,000 sq. m. drained.	
CABOOL, tributary to INDUS.	Lat. 34° 15', lon. 68° 10'. Near Sir-i-Chusma, in Afghanistan; elevation, 8,400 ft. Generally E., through the valley of Cabool, and plains of Jellalabad and Peshawar, into the Indus.—Length, about 320 m.	Suruj-Bhagar, 44; Murumurdwan, 86; Dharh, 56 m.—About 21,000; including Jhelum, 50,000; and with Kavee, 72,000 sq. m. drained.	
ZANSKAR, tributary to INDUS.	N. declivity of Bara-Lacha Pass, lat. 32° 47', lon. 77° 33'. N.W.—W.—N.W.—N.E.—N.W.—N.E., into the Indus, a few miles below Le.—Length, 150 m.	Suruji-Bhagar, 44; Murumurdwan, 86; Dharh, 56 m.—About 21,000; including Jhelum, 50,000; and with Kavee, 72,000 sq. m. drained.	
SUTLEJ, tributary to INDUS.	Remote sources, Lakes Manasarovar and Rakshwan Hrad, lat. 30° 8', lon. 81° 53'; 15,200 ft. above the sea. N.W., 180 m.; S.W., through Bussahir; W. to junction with Beas; S.W. to Punjnad.—Length, 550 m., to junction with Beas; 300 m. farther to Punjnad; total, 850 m.	Suruji-Bhagar, 44; Murumurdwan, 86; Dharh, 56 m.—About 21,000; including Jhelum, 50,000; and with Kavee, 72,000 sq. m. drained.	
BEAS, tributary to SUTLEJ.	On S. verge of Kotang Pass, lat. 32° 24', lon. 77° 11'. 13,200 ft. above the sea. S., 80 m.; W., 50 m.; then a wide sweep to N.W. for 80 m.; S., 80 m.; to Sutlej, at Andreesa.—Length, 290 m.	Suruji-Bhagar, 44; Murumurdwan, 86; Dharh, 56 m.—About 21,000; including Jhelum, 50,000; and with Kavee, 72,000 sq. m. drained.	
CHENAB, tributary to INDUS.	Near Bara-Lacha Pass, lat. 32° 48', lon. 77° 27'. N.W. to Murumurdwan; S.W. to confluence with Jhelum, thence S.W. to Ghara, or continuation of Sutlej.—Length, 605 m. to Jhelum, 765 m. to Ghara.	Suruji-Bhagar, 44; Murumurdwan, 86; Dharh, 56 m.—About 21,000; including Jhelum, 50,000; and with Kavee, 72,000 sq. m. drained.	

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JHELUM, tributary to CHENAB.	The Lidur, in N.E. mountains of Cashmere, near Shesha Nag. Through valley of Cashmere, and into Puijab by Baranula gorge; S. to Chenab confluence, in lat. 30° 10', lon. 75° 9'.—Length, 409 m.	Lidur, 50; Vishnu, 44; Sindh, 79; Lollab, 44; Kishengunga, 140; Kunihar, 100; Pirpanjal, 115 m.—About 280,000 sq. m. drained.	Navigable for 70 m. through Cashmere. Navigable from the Indus to the town of Ohind.
RAYEE, tributary to CHENAB.	Lat. 32° 26', lon. 77° in the Pirpanjal or Mid-Himalaya range, to the W. of Rotang Pass. S.W., about 40 m.; W. to Lahore; S.W. to junction with Chenab.—Length, 450 m.	Nye, 20; Sana, 36; Chakki, 50 m.—About 22,000 sq. m. drained.	Tortuous course: fordable in most places for eight months of the year.
SANPOO, tributary to BRAHMAPOOTRA.	N. face of Himalayas, lat. 30° 25', lon. 82° 5'. E., winding its way through Tibet, and washing the borders of the territory of Lassa. It then turns suddenly S., and falls into the Brahmapootra, under the name of Dihong.—Length, about 1,000 m.	Sanki-Sanpoo, Niamtsion, Zzangtsiou, Lalee Nuddee.	
TEESTA, tributary to BRAHMAPOOTRA.	About lat. 27° 59', lon. 88° 50'. S.—S.E., into Brahmapootra.—Length, 333 m.	Lachoong, 23; Rungbo, 22; Rungeet, 23 m.	Navigable for craft of 6 or 7 tons as far up as Puharpoor, 15 m. beyond the divergence of the Atiree.
BARAK, tributary to BRAHMAPOOTRA.	It is an offset from the Jeree, which leaves in lat. 24° 43', lon. 93° 13'. W. through Caehar and Silhet; S.W., into Megna.—Length, 200 m.	Decmree, of greater length than itself.	Banks low and marshy along the valley of Cachar.
MONAS, tributary to BRAHMAPOOTRA.	Himalaya range, lat. 28° 20', lon. 91° 18'. S., 40 m.; S.W., 110 m.; S.W., into Brahmapootra.—Length, 189 m.	Myitia Khyoung, 170 m.	
KHYENDWEN, tributary to IRAWADDY.	Burmah, lat. 26° 28', lon. 96° 54'. Generally S., into Irawaddy, near the town of Amyenmyo.—Length, 470 m.	Pench Nuddee, 150; Kanhan Nuddee, 130 m.—About 21,000 sq. m. drained, exclusive of Payne-Gunga and Wurdia.	Elevation at Bandara, lat. 21° 12'; 872 ft. above the sea.
WEIN-GUNGA, or PRENHITA, tributary to GODAVERY.	Mahadec Mountains, lat. 22° 25', lon. 79° 8'. E., 80 m.; S., 34 m.; S., 25 m.; S.W., 80 m.; S., 100 m.; into Godavery.—Length, 439 m.	Payne-Gunga, 320 m.—About 8,000 sq. m. drained.	Fordable, except at the height of the rains; then navigable for 100 m. above its mouth.
WURDA, tributary to WEIN-GUNGA.	Saupoora Mountains, lat. 21° 44', lon. 78° 25'. Generally N.W. to S.E.—Length, about 250 m.	Araun, 105; Koony, 65 m.—About 8,000 sq. m. drained.	
PAYNE-GUNGA, tributary to WEIN-GUNGA.	Lat. 20° 32', lon. 76° 4', in Candesh. Very circuitous, but generally E., into Wurdia.—Length, 320 m.	Thairnya, 85; Narinja, 75; Munnaada, 100 m.—About 11,000 sq. m. drained.	
MANERA, tributary to GODAVERY.	Lat. 18° 44', lon. 75° 30'. S.E.—S.W., into Godavery.—Length, 330 m.	Goor, 100; N'ecra, 120; Secna, 170; T'andoor, 85 m.—About 29,000 sq. m. drained.	
VEAY, tributary to KISTNAH.	Lat. 19° 5', lon. 73° 33', in the table-land of the district of Poona; 3,090 ft. above the sea. S.E., into Kistnah.—Length, 510 m.	Chinna Hugry; Hundry, 225 m.; Wurdia.—About 28,000 sq. m. drained	Rocky obstacles to navigation in upper part of course. Fine teak forests on banks.
TOONGABADRA, tributary to KISTNAH.	Lat. 14° lon. 75° 43', junction of Toonga and Budra rivers. N.—N.E., into Kistnah.—Length, 325 m.		
POORNAH, tributary to TAPTEE.	Lat. 21° 35', lon. 77° 41'. S., 65 m.; W., 95 m.; into the Taptee.—Length, 160 m.		
GIRNA, tributary to TAPTEE.	E. slope of W. Ghats, lat. 20° 37', lon. 73° 25'. E., 120 m.; N., 50 m.; into the Taptee.—Length, 160 m.		
BHOVANI, tributary to CAUVERY.	Among the Kundaah group, lat. 11° 15', lon. 76° 4'. E., into Cauvery.—Length, 120 m.		
NOVEL, tributary to CAUVERY.	E. slope of W. Ghats, lat. 10° 59', lon. 76° 44'. E., into Cauvery.—Length, 95 m.		
HUISOO, tributary to MAHANUDDY.	Lat. 23° 18', lon. 82° 32'. S., into Mahanuddy.—Length, 130 m.		
TELL, tributary to MAHANUDDY.	Lat. 19° 54', lon. 82° 41'. N.W., into Mahanuddy.—Length, 130 m.		

NOTE.—Of the above-named rivers, forty-nine main streams flow to the sea: the chief tributaries to these number 210, of which thirty flow for 200 m. and upwards; sixty-three have a course of 100 to 200 m.; and the remainder under 100 m.

*Rivers in Afghanistan, and in the Countries adjacent to India on the North-west—so far as known.*

Name and Length.	Source, Course, and Discharge.	Tributaries or Confluents; and their Length in English Miles	Remarks.
HELMUND.—650 miles . . .	Pughman range, lat. 34° 40', lon. 68° 2'; at an elevation of 10,076 ft. above the sea. Westerly; south-westerly to Pullahuk; north-westerly; in the Hamoon marshy lake, and that of Duk-i-Teer, by numerous channels.	At 25 m. below Girishk receives the Urgundab, 250 m.; Turmak.	At Girishk, 350 m. from source; banks, about 1,000 yards apart; in spring, spreads beyond these limits,—depth, 10 or 12 ft.—with a rapid current. At Pullahuk it was crossed by Christic, who found it, at the end of March, 400 yards wide, and very deep. In April the water (which is briny) is 7 or 8 yards wide, and 2 ft. deep. It is crossed on the route from Shawl to Kandahar.
LORAH.—About 80 miles . . .	Shawl table-land, lat. 38° 49', lon. 67° 20'. South-westerly, until lost in the sands of the desert of Khoresan.	Inderaub, 65; and Khanah-i-bad, 90 m.	
KOONDOOZ.—About 300 miles	Valley of Banian, about lat. 34° 52', lon. 67° 40'. Easterly; northerly; north-easterly; northerly; and north-westerly; into the Amoo or Jineon River.	Sir-i-Jungle, 90 m. . . . .	At Herat, it was formerly crossed by a brick bridge, but three out of thirty-three arches being swept away, communication is interrupted in time of inundation. It is remarkable for the purity of its water.
HERAT RIVER, or HERY.—About 600 miles.	It turns north-westerly, forming a junction with the Mooghaub; the united stream is ultimately lost in the desert of Khoresan.		From the bund N. of Lyarce, the river has no bed; as it fills, during the rains, the bund is swept away, and the water inundates the plain, which is here about 5 m. broad.
POORALLEE.—100 miles . . .	Jhalawan province, about lat. 27° 23', lon. 66° 21'. Southerly, through Lus province into the Indian Ocean, in lat. 25° 23', lon. 66° 20'; near Soumcanee.		
GHUZNEE.—About 60 miles . . .	Huzareh Mountains, about lat. 33° 50', lon. 68° 20'. Generally southerly, as far as lat. 33°; afterwards south-westerly; into Lake Abistada, in lat. 32° 42', lon. 68° 3'.	N.B.—The tributaries of these rivers, in the countries adjacent to India, are as yet very imperfectly known,—as indeed are also the origin and courses of the rivers themselves, or the countries through which they flow.	Liable to inundations; and as its bed, in some parts, occupies the whole breadth of the ravine, travellers are frequently overtaken by the torrent. Falls 3,751 ft. in 50 m., from source to Dadar.
BOLAN.—About 70 miles . . .	Sir-i-Bolan, Bolan Pass, lat. 29° 51', lon. 67° 8'; 4,494 ft. above sea. Remarkably sinuous, but generally south-easterly; forms a junction with the Nari River.	Turmak . . . . .	The Moola or Gundava Pass winds along its course.
MOOLA.—About 150 miles . . .	A few miles S. of Kelat, in Beloochistan. South-easterly, about 80 miles; north-easterly; and easterly; ultimately absorbed in the desert of Shikha poor.		Where crossed 12 m. from Kandahar, it is, ordinarily, about 40 yards wide, from 2 to 3 ft. deep, and fordable; but in inundations, becomes much increased. Greater part of its water drawn off to fertilise the country.
URGUNDAB.—250 miles . . .	Huzareh Mountains, about lat. 33°, lon. 67°. South-westerly to 25 m. past Kandahar; westerly remainder of course,—falls into the Helmund River.	Zhobe, about 170 m. . . . .	Its bed for a great distance forms the Gooliree Pass, or great middle route from Hindoostan to Khoresan, by Dera Ismael Khan and Ghuznee; crosses the Suliman range lat. 32°.
GOMUL.—About 160 miles . . .	Afghanistan, about lat. 33°, lon. 69° 6', at the foot of an offshoot from Suhed-Koh. S.; W.; and a little E. of S. to Goolkuts; thence E., N.E., and S.E., until absorbed by the sands of the Damian.		

Table-lands of British India—their Extent, Height, &c.

Name.	Locality.	Elevation, in Feet.	Remarks.
CENTRAL INDIA, including OODEYPOOR, MALWA, BHOPAL, BUNDELKUND, and SHALPUR.	Extends by the Arravulli, Dongurpoor, Vindhya, Bindyachal, Panna, and Ban-dair ranges,—73° to 84°; about 700 m. long; breadth, very various,—greatest from Amjithra to Ajmeer, 250 m.; from Mhow to Mokundurra, 150 m.; at Saugor and Dumoh, 75 m.; afterwards very narrow.	Highest towards S. and W.; average of Oodeypoor, 2,000 ft. Malwa, 1,500 to 2,000. Bhopal, 2,000. Bundelkund, about 1,000. Shahabad, 700. Plain of Ajmere, 2,000. Oodeypoor town, 24° 37', 73° 49'; 2,064 ft.—slope to N. E., Banas River flowing in that direction; gradual fall also to valley of Chumbul River, where it rises to Malwa; Mhow, 2,019. Dectaan, 1,881. Dhar, 1,908. Indore, 1,988. Crest of Jaum Ghaut, 2,328. Ojsein, 1,698. Adjygarh, 1,340. Amjherra, 1,890. Saugor, 1,940. Rhoasgarh, 700. Sonar River, source, 1,900 ft. From the Vindhya range the surface has a generally gradual, but in some places abrupt, descent; as at Mokundurra, and the Bindyachal hills, where rivers occasionally fall over the brow in cascades. Shahabad district very rocky and uneven.	Tin and copper are found in Oodeypoor. In Bhopal the prevailing geological formation appears to be trap overlying sandstone. Minerals are few and unimportant. Water is very plentiful. The mineral resources of Bundelkund appear to be considerable.
SOUTHERN INDIA, including DECCAN, MYSOOR, &c.	Supported as it were by a triangle formed by the Sautpoora or sub Vindhya on the N., W. Ghauts on the W., and E. Ghauts on the E.; the Sautpoora range constituting the base. Length, from Sautpoora River to Salem, about 700 m.; breadth from Mahabulshwar to Sirgoojah, about 700 m. If Chota-Nagpoor be considered as part of this great table-land, it may be said to extend nearly 250 m. farther in a north-easterly direction.	Highest parts, those nearest W. Ghauts, and in centre of Mysoor. Mahabulshwar 189, 73° 45'; 4,700 ft. Source of Kistnah, 4,500. Source of Godavary, 3,000. Poona, 2,823. Source of Manjira, 3,019 ft. Rivers rising in ravines between spurs of W. Ghauts, wind their way through E. Ghauts across the Deccan, the slope being in that direction. Plains of Nagpoor, 1,000 ft.—slope to S. E.; drained by Weim-Gunga, which falls into Godavary. Hyderabad, 1,800 ft. Secunderabad, 17° 26', 78° 33'; 1,837 ft. Beder, 17° 53', 77° 38'; 2,359 ft. From the Weim-Gunga the surface rises towards N. E., where Kypoor, 21° 12', 81° 40', is 1,747 ft. Source of Mahanuddy, 2,111; and Konketr, 20° 16', 81° 33', 1,953 ft. Nundy-droog, highest in Mysoor, 4,856 ft.; slope from hence on all sides.—S. to Bangalore, 3,000; E. to those of Carnatic—Chittoor, 1,100; N. to plains of Gooty, 1,182; and those of Bellary, 1,600 ft. Colar, 13° 5', 78° 10'; 2,800 ft. Mysoor town, 12° 18', 76° 42'; 2,450 ft. Seringapatam, 12° 25', 76° 45'; 2,412;—from hence, there is a gradual rise to Coorg, where Verajenderpetta is 3,399, and Merkara, 4,506 ft. From Bangalore, descent to S. by rather abrupt steeps to plains of Salem, 1,400, and Coimbatoor, 1,483 ft. From Belgaum, 15° 50', 74° 36', 2,500 ft., there is a gradual fall to the E. Bellary plains, 1,600 ft. Gooty plains, 1,182; Cuddapah town, 507; and E. part of Cuddapah dist., 450 ft. Chota-Nagpoor, 3,000 ft.; hills running E. and W., but of little elevation; Sirgoojah, mountainous, rising 600 to 700 ft. above level of Chota-Nagpoor; Myrnat table-land, about 30 m. S. E. from Sirgoojah town; area not ascertained—about 3,000 or 3,500 ft. Palamow dist., very mountainous—little known. Hazarebigh town, 24°, 85° 24'; 1,750 ft. Slope of country to S., towards Sumbulpoor—N. and E. parts of dist. very mountainous, but level, and even depressed towards Mahanuddy. Sumbulpoor town, only 400 ft. Orissa table-land then rises on the other side of Mahanuddy, in some places to 1,700 ft., backed by the chain of E. Ghauts. Amarkantak, jungly table-land, 22° 40', 81° 50'; 3,500 ft.	Hypogene schists, penetrated and broken up by prodigious outbursts of plutonic and trappean rocks, occupy by the greater portion of the superficies of Southern India. The central part of the Deccan is composed of waving downs, which, at one time, present for miles a sheet of green harvests, but in the hot season, bear the appearance of a desert, without a tree or shrub to relieve its gloomy sameness. The seaward face of the table-land towards the W., though abrupt, is not precipitous, but consists of a succession of terraces or steps. On the Coromandel side the slope to the sea is gentle, exhibiting the alluvial deposits borne down from the higher portions of the table-land.
South-West Frontier of Bengal, including CHOTANAGPOOR, SIRGOOJAH, PALAMOW, RAMGURH, HAZAREEBAGH, MYNPAT and AMARKANTAK.	Between 22° 30' and 24° 30'; and easterly, from about 85° to 82°.	The soil in the plains is generally fertile, producing abundant crops of wheat, barley, rice, pulse, excellent vegetables, cotton and sugar-cane. The uncultivated parts are overrun with a coarse grass. A great part of the region is quite unknown to us.	The soil in the plains is generally fertile, producing abundant crops of wheat, barley, rice, pulse, excellent vegetables, cotton and sugar-cane. The uncultivated parts are overrun with a coarse grass. A great part of the region is quite unknown to us.
NEPAUL . . . . .	At the foot of the Himalaya range, between Himakaya and the Farai; 500 m. long; E. to W., 160 m. broad; area, 54,500 sq. m.	The surface generally consists of valleys varying from 4,000 to 6,000 ft. above Bengal plains. Khatmandoo (in an oval-shaped valley 12 m. long), 27° 42', 85° 18'; 4,628. Bhynturee, 29° 34', 80° 30'; 5,615 ft. Slope to S. drained by Ghogra, Gunduck, and Coosy.	The geological formation of the hilly tract—limestone, hornstone, and conglomerate. Vegetable productions of most remarkable staleness, beauty, and variety. Climate resembles that of southern Europe.

Table-lands of Afghanistan and the Countries adjacent to India, on the North-west.

Name.	Locality.	Elevation, in Feet.	Remarks.
WESTERN AFGHAN- ISTAN.	From about Ghuznee or Sufed-Koh, to Amran Mountains, N. to S.; and from near Kandahar to the Suliman range.	Crest of highland of Ghuznee, lat. 30° 43', lon. 68° 20'; 9,000 ft. Ghuznee, 33° 34', 68° 18'; 7,726. Yerghuttoo, 33° 20', 68° 10'; 7,502. Mookur, principal source of Turmak River, 32° 50', 67° 37'; 7,091. Abistada Lake, 32° 35', 68° 0'. Punguk, 32° 36', 67° 21'; 6,810. Shuful, 32° 28', 67° 0' 12'; 6,514. Sir-i-Asp, 32° 15', 66° 54'; 5,973. Kelate-i-Gillie, 32° 8', 66° 45'; 3,773. Julduk, 32° 66' 28"; 5,396. Hydurzie, 30° 23', 66° 51'; 5,250. Hukalzie, 30° 32', 66° 50'; 5,063. Teer-Andaz, 31° 35', 66° 17'; 4,829. Kandahar, 32° 37', 65° 28'; 3,484 ft.	Afghanistan, for four-fifths of its extent, is a region of rocks and mountains, interspersed with valleys of great fertility, and in many places containing table-lands, cold, bleak, and barren. It has a surface as rugged as that of Switzerland, with summits of much greater height. General slope of country, from N.E. to S.W.
NORTHERN AFGHAN- ISTAN.	Between Hindoo-Koosh on the N., and Sufed-Koh on the S.; and from country on the W., and Khyber hills on the E.	Kurzar, near source of Helmund, 34° 30', 67° 54'; 10,939 ft. Kalloo, 34° 30', 67° 56'; 10,883. Youart or Oord, 34° 22', 68° 11'; 10,618. Gooliatooe, 34° 31', 68° 5'; 10,500. Shibbertoo, 34° 50', 67° 20'; 10,500. Siab-Sung, 34° 34', 68° 8'; 10,488. Gurdan Dewar, 34° 25', 68° 8'; 10,076. Soktah, 34° 40', 67° 50'; 9,839. Khawak Fort, 35° 38', 70° 5'; 9,300. Topchek, 34° 45', 67° 44'; 9,085. Chasgo, 33° 43', 68° 22', 8,697. Bamian, 34° 50', 67° 45'; 8,496. Hutasaya, 33° 49', 68° 15'; 8,420. Sir-i-Chusma, 34° 21', 68° 20'; 8,400. Zohak's Fort, 34° 50', 67° 55'; 8,186. Killa Sher Mahomed, 33° 16', 68° 45'; 8,051. Kot-i-Aeruf, 34° 28', 68° 35'; 7,749. Maidan, 34° 22', 68° 43'; 7,747. Urghtundee, 34° 30', 68° 50'; 7,628. Khoord Kabool, 34° 21', 69° 18'; 7,466. Kabool, 34° 28', 69° 12'; 6,396. Boothauk, 34° 30', 69° 15'; 6,247. Jugdulluk, 34° 25', 69° 46'; 5,370. Gundamuk, 34° 17', 70° 5'; 4,616. Crest of Khyber Pass, 34° 8', 71° 15'; 3,373. Ali-Musjid, 34° 3', 71° 22'; 2,433. Jellalabad, 34° 25', 70° 28'; 1,964 ft.	Slope from W. to E.; Kabool River flowing in that direction: lofty mountains enclosing valley of Jellalabad on N. and S. sides. Course of river obstructed, and bed contracted by ridges of rock connecting them. City of Kabool surrounded by hills on three sides. Jellalabad, on a small plain, to S.W.
SHAWLAND FISHEEN	Between Hala and Amran ranges, on the N. frontier of Beloochistan.	Khojuck Pass, Amran Mts., 30° 45', 66° 30'; 7,449 ft. Pisheen, from 5,000 to 6,000. Shawl exceeds 5,000. Town of Shawl, 5,563. Dasht-i-Bedowlat, 30° 57'; about 5,000. Siraab, 30° 3', 66° 33'; 5,793 ft.	Wildest parts of enclosing mountains, —haunts of wild sheep and goats: more accessible tracts yield pasture to herds and flocks. Orehards numerous. Dasht-i-Bedowlat ( <i>veretized plain</i> ), destitute of water.
BELOOCHISTAN	S. of Afghanistan	Kelat, 28° 53', 66° 27'; 6,000 ft. Sohrab, 28° 22', 66° 9'; 5,800. Munzilghah, 29° 53', 67° 0'. Angeera, 28° 10', 66° 12'; 5,250. Bapow, 28° 16' 66° 20'; 5,000. Peesse-Elhont, 28° 10', 66° 35'; 4,900. Sir-i-Holan, 29° 50' 67° 14'; 4,494. Putkee, 28° 5', 66° 40'; 4,250. Paeesht-Khana, 27° 59' 66° 47'; 3,500. Nurd, 27° 52', 66° 54'; 2,850. Ab-i-Goom, 29° 46', 67° 23'; 2,540. Jungi-koosht, 27° 55', 67° 2'; 2,150. Bent-i-Jah, 28° 4', 67° 10'; 1,850. Beebee Nanee, 29° 39', 67° 28'; 1,695. Kohow, 28° 20', 67° 12'; 1,250. Gurmab, 29° 36', 67° 32'; 1,081. Kullar, 28° 18', 67° 15'; 750 ft.	Coast craggy, but not elevated; in some places a sandy shore; inland surface becomes higher. Most remarkable features of Beloochistan, rugged and elevated surface, barrenness, and deficiency of water. It may be described as a maze of mountains, except on the N.W., in which direction the surface descends to the Great Desert on the S., where a low tract stretches along the sea-shore.
CASHMERE AND BUT- TISTAN, or LITTLE TIBET.	Western Himalaya	Average of Cashmere valley, between 5,000 and 6,000 ft. Huramuk Mt. 15,000. Pir-panjal, 15,000. Small elevations in valley, 250 to 500 ft. Average of valley of Indus (N. of Cashmere vale), 6,000 to 7,000 ft. Slope from S.E. to N.W. Mountains on each side rising from 6,000 to 8,000 ft. higher.	Mountains enclosing Cashmere vale, basaltic. Ranges on each side of Bultistan valley rugged, bare, and nearly inaccessible; formation generally of gneiss; that of the valley, shingle and sand.

**PRINCIPAL CITIES.\***—A description of the cities and towns in India would occupy several volumes: all that can here be given is a brief note on some of the best known.†

*Calcutta*,—on the left bank of the Hooghly, about 100 m. from the sea; present seat of supreme government; a village when acquired by the English in 1700. Length, about  $4\frac{1}{2}$  m.; breadth,  $1\frac{1}{2}$  m.; area, nearly 8 sq. m. Beyond the Mahratta Ditch (an intrenchment intended as a defence against the incursions of the Mahrattas), are the suburbs of Chitpoor, Nundenbagh, Bahar-Simlah, Sealdah, Eutally, Ballygunge, Bhowaneepeer, Allipoor, and Kidderpoor. On the opposite side of the river lie the villages of Seebpoor, Howrah, and Sulkea. The city is defended by Fort William, a large and strong fortress, built on a plain, of an octagonal form, somewhat resembling that of Antwerp: it mounts 619 guns.

In May, 1850, the population of Calcutta, exclusive of suburbs, was 413,182; number of residences, 62,565; of huts, 49,415. Among the public buildings are the Government-house, a magnificent structure; the Town-hall, a handsome edifice; the Supreme Court of Judicature, the Madrissa and Hindoo colleges, Metcalfe Hall, and the Ochterlonny monument. About three miles below the city, on the Howrah side, there are extensive botanical gardens, laid out with good taste and effect.

The most elevated part of Calcutta (Clive-street) is only thirty feet above the sea-level at low-water. It appears to me very probable that the whole city will some day be submerged by the shifting beds of the Hooghly or Ganges.

*Madras*,—on the Coromandel coast, consists of three broad streets, running north and south, dividing the town into four nearly equal parts; they are well built, and contain the principal European shops. On the beach is a line of public offices, including the Supreme Court, the Custom-house, the Marine Board Office, and the offices and storehouses of the principal European merchants. The other buildings are, the Mint, the Roman Catholic Cathedral, the Church Mission Chapel, Armenian Church, Trinity Chapel, the General Hospital, and Medical School. Fort St. George is in form an irregular polygon, somewhat of a semicircle, of which the sea-face, which is well armed with heavy guns, is nearly a diameter.

No part is probably more than twenty feet above the sea-level. Population, 720,000, including the Black Town and suburbs.

*Bombay*.—The old town, built on the island, is about 2 m. in circuit, and strongly fortified; the recent increase of the calibre of the guns has completed the means of defence. Few remarkable buildings. There is a Government-house, an excellent dockyard and foundry for steam-vessels, a church within the fort, and one on the island of Colaba, where there are considerable cantonments: several banks, insurance companies, the Steam Navigation Company, Bombay branch of Asiatic Society, Bombay Geographical Society, &c.; and the leading merchants have their offices within the fort. Population, 566,119, including the widely-scattered suburbs.

*Agra*,—formerly a large city; the old walls remain, and mark out a space extending along the Jumna,

\* The several positions of these places, and their elevation, will be given in a Topographical Index.

† Full details will be found in Thornton's excellent *Gazetteer*.

about 4 m. in length, with a breadth of 3 m.; the area is about 11 sq. m.; but not one-half is at present occupied. There is one wide street running from the fort in a north-westerly direction. The houses are built chiefly of red sandstone. Within the fort is the palace of Shah Jehan, and his hall of audience; the Motee Masjid or Pearl Mosque, and other structures. The celebrated Tajmahal, or mausoleum of Shah Jehan, is outside the city, and about a mile east of the fort. Adjacent to the city, on the west, is the Government-house, the official residence of the lieutenant-governor of the North Western Provinces. Population, 66,000.

*Ahmedabad*,—on the left bank of the Saburmuttee,  $5\frac{1}{2}$  m. in circumference, surrounded by a high wall, with irregular towers every fifty yards. The noblest architectural relic is the Jumma Masjid or Great Mosque, built by Ahmed Shah of Guzerat, the founder of the city. Near the city wall is a tank a mile in circumference. Population said to amount to 30,000.

*Ajmere*,—a city of great antiquity and celebrity—situate in a picturesque valley, surrounded by hills, on the base and slope of one of which the town is built. A wall of stone, with five strong gateways (all on the north and west sides), surround it. The town contains several large mosques and temples. Some of the streets are wide and handsome. The houses of the wealthy are spacious, and generally well built: the habitations of the poorer classes are more commodious than ordinary. The strong fort of Taraghur, with a walled circumference of 2 m., surmounts the hill rising above the city: it contains two tanks, and commands another outside.

*Allahabad*,—at the confluence of the Ganges (here  $1\frac{1}{2}$  m. wide) and Jumna, ( $\frac{3}{4}$  of a m. in width.) The fort on the east and south rises directly from the water, and is in form a bastioned quinquangle, 2,500 yards in circuit, and of great strength. The town extends along the Jumna, to the west of the fort. Notwithstanding the advantageous position, it is an ill-built and poverty-stricken place. The Jumma Masjid is a stately building, but without much ornament. Population, 70,000. [This ought to be the seat of Supreme Government for India.]

*Almora*.—Principal place of the British district of Kumaon, situate on the crest of a ridge running from east to west, consists principally of one street,  $\frac{3}{4}$  of a m. long, secured by a gate at each end, and forming two bazaars, divided from each other by Fort Almora, and by the site of the ancient palace of the rajahs of Kumaon, now occupied by a gaol. Detached houses, chiefly inhabited by Europeans and Brahmins, are scattered along each face of the mountain below the town. Fort Moira is at the western extremity, and adjoins the military lines.

*Amritsir*.—A walled city, about half-way between the Beas and Ravee rivers. It owes its importance to a *Tulao* or reservoir, which Ram Das caused to be made here in 1581, and named it Amrita Saras, or "fount of immortality." It is a square, of 150 paces, containing a great body of water, pure as crystal, though multitudes bathe in it: it is supplied, apparently, from natural springs. On a small island in the middle is a temple, to which are attached 500 or 600 priests. On this island Ram Das (the founder) is said to have spent his life in a sitting posture. City very populous and extensive; streets narrow; houses lofty. Manufactures—cloths, silks, and shawls. There is besides a very extensive transit trade, and considerable monetary transactions. Most striking ob-

ject, the fortress Govinghur; its great height and heavy batteries, rising one above the other, giving it a very imposing appearance. Population, 80,000 or 90,000.

*Bangalore*.—Town tolerably well built, has a good bazaar, and is inclosed by a wall, a ditch, and a broad fence of thorns and bamboos. Fort oval, constructed of strong masonry: within it is the palace of Tippoo Sultan, a large building of mud. Manufactures—cotton and silk; but the present importance of the place results from its being the great British military establishment for the territory of Mysoor. The cantonment is nearly 2½ m. in length, and 1 m. in breadth. Population, 60,000.

*Bareilly*,—situate in a pleasant and well-wooded country in the N.W. provinces. It is a considerable town, the principal street or bazaar being nearly 2 m. long, has a brisk and lucrative commerce, and some manufactures, of which the principal is that of house furniture, cotton-weaving, muslins, silks, jewellery, gold, silver, and metal working, besides numerous others. Population, 92,208. Cantonment at south side of town, near the new fort, which is quadrangular, and surrounded by a ditch: it is the head-quarters for the Rohilcund division.

*Baroda*,—situate near the river Biswamintri, which is here crossed by a stone bridge. The town is surrounded by numerous groves containing many mosques, mausolea, and tombs of Mussulmen, which give an impressive solemnity to the scene. The fortifications, of no great strength, consist of slight walls, with towers, and several double gateways. Town intersected and divided into four equal quarters, by two spacious streets, meeting in the centre, at a market-place. Houses, in general, very high, and built of wood. Population, 140,000.

*Beejapoor*.—The walls, which are of hewn stone and very lofty, are entire, but inside all is desolation. The deep moat, the double rampart, and the ruins of the palaces in the citadel, attest its former magnificence. The Great Mosque is a grand edifice, and the tomb of Ibrahim Adil Shah, remarkable for elegant and graceful architecture. The chief feature of the scene is the mausoleum of Mohammed Adil Shah, the dome of which fills the eye from every point of view. The fort has a rampart flanked by 109 towers. The works surrounding it, and the citadel in the interior, are very strongly built; the parapets are 9 ft. high, and 3 ft. thick. The ditch is from 40 to 50 ft. in breadth, and about 18 deep: the curtains, which appear to rise from the bottom of it, vary from 30 to 40 ft. high, and 24 ft. thick. A revetted counterscarp is discernible, the circuit of which is 6½ m., and its ground-plan deviates little from a circle. To the westward of the fort there is a vast mass of ruins, from the numerous edifices of every description scattered around. Beejapoor was evidently one of the greatest cities in India. It was formerly divided into several quarters, one of which is 6 m. in circumference. Among the various wonders of this ruined capital, is the gun called Malik-i-Maidan, or "the King of the Plain," one of the largest pieces of brass ordnance in the world.

*Bekaneer*,—capital of the Rajpoot state of the same name, viewed from without presents the appearance of a great and magnificent city. The wall, which is built of stone, is 3½ m. in circuit, 15 to 30 ft. high (including parapet), 6 ft. thick, surrounded on three sides by a ditch 15 ft. deep and 20 ft. wide; there are five gates and three sally-ports. The interior exhibits a rather flourishing appearance;

many good houses, neat and uniform, with red walls, and white doors and windows. Eighteen wells within the city; depth of each about 240 ft. Citadel situate ½ a m. N.E. of the city, and quite detached from it; defences, about ¾ of a m. in circuit, constructed of good masonry. The rajah's residence occupies nearly the whole of the inside. Population, stated by Boileau and Tod, 60,000.

*Belgaum*,—Southern Mahratta country. Fort of an oval ground-plan, 1,000 yards long, 700 broad, and surrounded by a broad and deep wet ditch, cut in very hard ground. In 1848, the inhabitants formed a committee, and in four months reconstructed all the roads of the town, extending to a length of between 9 and 10 m. Belgaum was selected as the site of the educational institution for the instruction of the sons of natives of rank: in February, 1853, the number of pupils exceeded 50.

*Bellary*.—The fort, or fortified rock, round which the cantonment is situate, is a hill of granite: length, 1,150 yards; height, 450 ft.; circumference, 2 m.; eastern and southern sides precipitous; western face slopes gradually towards plain. Lower fort, ½ a m. in diameter, contains barracks, arsenal, and commissariat stores, church, two tanks, and several on the top of the rock. Native population in 1836, exclusive of military, 30,426.

*Benares*,—on the Ganges, 3 m. long, 1 m. broad. Streets very narrow, and access gained to the river by noble ghauts, extending along the bank of the river, in the city. Numerous Hindoo temples, which render it a celebrated place of pilgrimage. Population, 300,000.

*Bhagulpoor*,—on the right bank of the Ganges here 7 m. wide during the rains. Though represented to be 2 m. long and 1 broad, it is a poor place, consisting of scattered market-places, meanly built; it is, however, ornamented by European residences and by mosques. Cavalry barracks, occasionally occupied; 4 m. from them are those of a native corps formed of the highlanders (Sonthals or Puharees) of the Rajmahal wilds. There is also a court of justice, a gaol, and an educational institution.

*Bhooj*,—the capital of Cutch, at the base of a fortified hill. When viewed from the north, has an imposing appearance. Rajah's palace, a castle of good masonry. A large tank has been excavated at the west end of the city. Population, about 20,000.

*Bhopal*.—Town surrounded by a wall of masonry about 2 m. in circuit, within which is also a fort of masonry. Outside, a large *gunje* or market, with wide straight streets. The fort of Futtyghur is on a rock S.W. from the town. S.W. of the fort is Bhopal Tal, or Lake, 4½ m. long, 1½ m. broad: another tank, 2 m. long, is on the east. They are deep, and abound with alligators, hut both appear to be artificial. The Bess river has its rise in the former. Bhopal is the seat of the British political residency.

*Bhurtpoor*.—Town 3 m. long, 1½ broad, and about 8 in circumference. Its site is somewhat depressed; and this circumstance, in a military point of view, contributes to its strength; as the water of a neighbouring *jhil*, being higher than the ditch of the town, can be discharged into it in such a volume, as to render it unfordable. The defences are now shapeless piles of mud.\* This measure of repair was permitted to the young rajah, after attaining majority, in 1844, and the walls allowed to be maintained in a condition (in the rajah's words) "to keep out thieves and wild beasts;" and the town itself is

\* See Historical Section, 1805-'6, and 1824-'5.



merely a great collection of hovels; but it is a thriving place, having a trade in the Sambhur Lake salt. Population estimated at 100,000.

*Burdwan*,—on the left bank of the Damoodah. The rajah's residence is a great collection of buildings of various sizes and colours, and without symmetry or regularity: the town an assemblage of crowded suburbs, wretched huts, a few handsome houses, but no temple of striking effect. Contiguous to the town is an artificial piece of water, having an estimated area of 30 acres, and much frequented by the natives for bathing. Burdwan contains the civil establishment of the district, and two English schools.

*Cawnpoor*,—on the right bank of the Ganges; area of the city, 690 acres; contains about 11,000 houses, and nearly 59,000 inhabitants. Population of cantonments, 49,975; making a total of 108,796, exclusive of the military. Commerce—busy and important; the Ganges (which is here 500 yards wide when lowest, and 1 m. wide when swollen by the periodical rains) being navigable to the sea, a distance of 1,000 m., and upwards to Sukertal, a distance of 300 m.

*Coimbatour*,—situate near the left bank of the Noyel, a tributary of the Cauvery, in a dry and well-cultivated country, near the base of the Neilgherry group of mountains. Streets wide, airy, and neatly built; European quarter eastward of the town, and detached from it. In the time of Hyder Ali it is said to have contained 4,000 houses, but it suffered much in the wars between the British and Mysoor.

*Cuttack*,—situated on a tongue of land near the bifurcation of the Mahanuddy. Fortifications in a ruinous state, their materials fast disappearing, the stones being carried away, and used in various public works; among others, in the lighthouse at False Point, and in the macadamization of the cantonment roads. Within the fort is an old mosque. Town straggling, and exhibits evident signs of decay. The Jumma Masjit, and the "Kuddum Russool," Moslem buildings, are inelegant, and Brahminical temples small and ungraceful. Manufactures—brass cooking-vessels and shoes. Population estimated at 40,000.

*Dacca*,—on the Burha Gunga, an offset of the Koniae or Jabuna; 4 m. long, and  $1\frac{1}{3}$  m. broad. It is at present a wide expanse of ruins. The castle of its founder, Shah Jehangir, the noble mosque he built, the palaces of the ancient newaubs, the factories and churches of the Dutch, French, and Portuguese, are all sunk into ruin, and overgrown with jungle. The city and suburbs are stated to possess ten bridges, thirteen ghauts, seven ferry-stations, twelve bazaars, three public wells, a variety of buildings for fiscal and judicial purposes, a gaol and gaol-hospital, a lunatic asylum, and a native hospital. Population, 200,000.

*Delhi*,—about 7 m. in circumference, is inclosed on three sides by a wall, and on the other, the river. Streets mostly narrow; the principal one is  $\frac{3}{4}$  of a m. long, and 50 yds. wide, with good shops on each side. Population, 137,977.

*Dinapoor*.—Important military station on the right bank of the Ganges. Remarkable for the barracks, which are magnificent buildings, and of great extent. Church, spacious and handsome.

*Golconda*.—Fortress and ruined city, in the Nizam's dominions. Fortress on a rocky ridge of granite, is extensive, very strong, and in good repair, but is commanded within breaching distance. Being the depository of the treasures of the Nizam, and also used as a state prison, it is very strictly guarded, and

entrance cannot be obtained by any but officials. The ancient mausolea form a group about 600 yards from the fort, the stern features of the surrounding, rocky ground heightening the impressiveness and grandeur of those astonishing buildings. These tombs were erected at great expense, some of them being said to have cost £150,000. The diamonds of Golconda have obtained great celebrity throughout the world. (See Minerals.)

*Gwalior*,—the capital of the possessions of Sindia's family. The rock on which the celebrated Hill Fort is situate, is completely isolated: greatest height at the north end, 342 ft. The approach, by means of steps cut in the rock, is so large, and of such gentle acclivity, that elephants easily ascend. The passage, protected by guns pointing down it, has a succession of seven gates. Within the enclosure there are several tanks, capable of supplying an adequate garrison, though 15,000 men would be required to man the defences. The town lies along the eastern base of the rock; it is large, but irregularly built, and contains a cannon-foundry, and gunpowder and firework manufactory.

*Hurdwar*, or sometimes Gangadwara, the "Gate of the Ganges,"—a celebrated place of Hindoo pilgrimage. Town evidently of great antiquity, is situate close to the western bank; the foundations of many of the houses in the bed of the river.

*Hydrabad* (Deccan).—The ground plan is a trapezoid, the longest or north-western side of which, extending along the river Mussi, is about  $2\frac{1}{2}$  m. in length; the south-eastern, 2 m.; the southern, 1 m.; the south-western,  $1\frac{1}{3}$  m. A suburb on the river side communicates with the city by a stone bridge. Streets, some paved; narrow; houses close together, and displaying little or no taste. The most remarkable structures are the principal mosque, and the British residency. Population, probably not exceeding 200,000.

*Hydrabad* (Sinde),—on the Gunjah hills, 4 m. from the Indus. Outline of fortress irregular, corresponding with the winding shape of the hills. Walls built of burnt bricks, thick at the base, but taper towards the top, and weakened by loopholes. There are about 5,000 houses; bazaar extensive, forming one street the entire length of the town. Manufactures—arms, and ornamental silks and cottons. Population (supposed), 24,000.

*Indore*,—capital of the possessions of Holcar's family. Outline of city, nearly a square of 1,000 yards; area, about 216 acres: ill-built, the houses disposed in irregular winding streets, constructed with sun-dried bricks, and covered with clumsy tiles laid on bamboos. It contains a few mosques, but has no architectural pretensions. The British residency, east of the town, has a pleasing scene.

*Jessulmere*,—built at the base of the south end of a rocky range of hills. Ramparts and bastions of uncemented stone; circuit, about  $2\frac{1}{2}$  m.; height, 14 ft., including a parapet of 6 ft.; thickness of ramparts, 4 ft.: these defences are in many places so obliterated by sand-drifts, that they may be crossed on horseback. There are four gateways and three sally-ports. Outline of citadel an irregular triangle, about  $\frac{2}{3}$ ths of a mile in circumference; interior occupied by the palace, and several temples and dwellings. At the time of Boileau's visit, in 1835, there were 6 guns, a large howitzer, and 3 field-pieces.

*Jeypoor*,—in a small plain surrounded by hills on all sides, except the south. It is about 2 m. long, E. to W.; 1 m. broad, encompassed by a wall

of masonry, with lofty towers and well-protected gateways, and considered to be the most regularly built of the cities laid down by native Indians. A main street, 2 m. long and 40 yards wide, extends from E. to W.; this is intersected by several streets of the same width; and at each point of intersection is a *chauk* or market-place; and the whole is portioned out into rectangular blocks, the palace and royal premises being in the centre. Houses in the principal streets are generally built of stone, and, with the fine temples, add to the architectural splendour of the town. Population, 300,000.

*Joudpoor*,—on the north-eastern edge of a cultivated but woody plain. Site striking, being at the southern extremity of a ridge 25 m. long, between 2 and 3 m. broad, and from 300 to 400 feet above the average level of the plain. Built on an irregular surface, sloping upwards towards the base of the rock surmounted by the citadel, and inclosed by a rampart 5 m. in circumference. There are several tanks within the walls; but all fail in long-continued droughts, except the Rani Sagur, which is reserved exclusively for the garrison, being thrown open to the citizens only on extreme emergency. North-east of the city is the suburb Mahamandir. Population, 60,000.

*Khatmandoo*.—Capital of Nepaul, situate in a valley,\* and on the east bank of the Bishnmuttery river. Length, about 1 m.; average breadth, scarcely  $\frac{1}{2}$  of a m. Streets narrow; houses brick, with tiled roofs, and though of several stories, are of mean appearance. Town adorned by several temples, the gilded pinnacles of which have a picturesque effect. The river is crossed by two bridges, one at each extremity of the town. Population estimated at 50,000; number of houses, 5,000.

*Lahore*,—surrounded by a brick wall, and defences 7 m. in circumference: fort at the north-west angle; there are several large and handsome mosques, besides Hindoo temples. Streets narrow; houses lofty; bazaars contracted and mean. Population, 100,000, or 120,000.

*Loodiana*,—four miles from left bank of the Sutlej: town ill-built, and without a wall, but having a fort of no great strength, which was constructed in 1808, on the north side, situate on a bluff, rising about 30 ft. above the *nullah* or watercourse. It is a thriving place, the residents including several capitalists, among whom are corresponding bankers; and as the mart lies on one of the principal routes between Hindoostan and Afghanistan, it has a considerable transit trade. Manufactures—cotton, cloth, and shawls. Population estimated at 20,000; chiefly Mohammedans.

*Lucknow*,—extends about 4 m. along the bank of the Goomtee. Streets, with few exceptions, crooked and narrow; number of brick-built houses small—palaces of showy architecture. The great ornament is the Imambarah, a Moslem cathedral, and the mosque attached to it. Population, 300,000.

*Masulipatam*,—on a plain stretching to the base of the E. Ghauts. Fort built on a swamp overflowed by the sea at spring-tides. Ground-plan, an oblong rectangle, 800 yards long and 600 broad, with high ramparts and a wide and deep ditch. The native town is situated south-west of the cantonment, and has some wide and airy streets, tolerably straight, and well built. Population, in 1837, 27,884.

*Meerut*,—situate in the Doob, and nearly equidistant from the Ganges and the Jumna. Ruined wall of the town extensive, inclosing a considerable

space. Streets narrow, and houses ill-built. Most important structure, the English church. Cantonments 2 m. north of the town. Population, 29,014.

*Mhow*.—In the territory of Indore. Its appearance is that of an European town, having a church with steeple on an eminence, a lecture-room and library, and a theatre. A considerable force is stationed at the cantonments, which are situate  $1\frac{1}{2}$  m. S.E. from the town.

*Mirzapoor*,—consists mainly of three long, wide, straight streets, along the side of which are rows of trees and wells. The houses, seldom more than two stories high, are for the most part built of mud or unburnt brick; those of the Europeans, which are the best, occur only at considerable intervals. It derives its present importance principally from its being the greatest cotton mart in India; military cantonment situated three miles north-east of the city. Population, 55,000.

*Mooltan*.—An ancient city, 3 m. east of the Chenab, whose inundations reach the fort. It is built on a mound of considerable height, formed of the ruins of more ancient cities. Bazaars extensive; about 4,600 shops. Manufactures—silks, cottons, shawls, loongees, brocades, tissues. Banking constitutes a large proportion of the business, and the merchants are considered rich. Population estimated at 80,000.

*Moorshedabad*,—extends about 8 m. along both banks of the Ganges, with an average breadth of 4 m. Though a place of considerable commerce it consists but of mud buildings, lying confusedly together. Unapproachable by craft of above a foot draught, during the dry months of spring. Population about 150,000.

*Muttra*,—extends along the Jumna in the form of a crescent, and, with its great ruined fort, has a very picturesque appearance; but its streets are steep, narrow, winding, and dirty. Population, in 1846, 49,672.

*Nagpoor*.—About 7 m. in circumference, but very irregular in shape. There is but one good street, the others being mean and narrow. Throughout the town no specimen of fine architecture; the rajah's palace, which is the most considerable building, is devoid of symmetry or beauty; it is merely a large pile of masonry, completely obscured by the encroachments of mean mud huts built against its walls. Population, 111,231.

*Oodeypoor*, Rajpoot city,—situate on a low ridge, in a valley, where extends an artificial lake 5 m. in circuit. Town ill-built; palace, a noble pile of granite, 100 ft. high, and overlooking the city.

*Oojein*,—in the territory of Gwalior, on the Seepra. It is of oblong outline, 6 m. in circumference, surrounded by a stone wall with round towers. Houses crowded together, and built either of brick or wood. Principal bazaar, a spacious street. There are four mosques, and many Hindoo temples. City well supplied with water. The head of the Sindia family has a spacious palace here, but of little exterior magnificence. At the southern extremity of the town is the observatory constructed by Jai Sing, the scientific rajah of Jeypoor. Principal trade in cotton fabrics, opium, and the wares of Europe and China. It is one of the seven sacred cities of the Hindoos, and the first meridian of their geographers.

*Palna*.—City extends about  $1\frac{1}{2}$  m. along the Ganges, inclosed by a rectangular wall, and has extensive suburbs; the principal one, on the east, called Marusganj, contains the chief market, and many store-

\* See Note at end of "Mountains."

houses for grain. This is joined by another, denominated Giafir Khan. On the other side of the city is a long, narrow suburb, extending to Bankipoor, a distance of about 4 m.; this is the European quarter. The better class of houses in the city are built of brick, but the greater number of mud, and generally tiled. Population, 284,132.

*Peshawur*,—built by Akber, who fixed the name, signifying "advanced post," in reference to its being the frontier town of Hindoostan towards Afghanistan, is situate on a plain about 18 m. east of the eastern extremity of the Khyber Pass, and 44 m. from the Indus. In the early part of the present century, when visited by Elphinstone, it was a flourishing town, about 5 m. in circuit, and reported to contain 100,000 inhabitants. Twenty years later, Runjeet Sing demolished the Balla Hissar, the state residence, injured the city, and laid waste the surrounding country. The fortress, erected by the Seiks on the site of the Balla Hissar, is a square of about 220 yards, with round towers at each angle, and surrounded by a wall of mud 60 ft. high, fausse-braie 30 ft., and a wet ditch. The city is now improved under the British government. Population, 56,045; Hindoos, 7,706; remainder, Mussulmen.

*Poona*,—an ill-huilt city, without walls or fort; bazaars mean, streets irregular; recent improvements have somewhat changed its appearance. Between 1841 and 1846, 400 new houses were built, and several more were in the latter year in course of construction. A bridge over the Nagjurree Nullah was completed, and a stone one replaced for the old Mahratta bridge over the Moota Moola; there is another called the Wellesley bridge; the streets in the eastern part of the city have been macadamized, and a full supply of water secured to the population. The most remarkable building is the palace, formerly the residence of the Peishwa; situation picturesque. Population, 100,000.

*Rangoon*, or the "City of Victory,"—situated about a mile from the river of the same name. Ground-plan, a square of about  $\frac{2}{3}$ ths of a m., having at its northern side a pagoda as a citadel. It has been twice burnt (in 1850, when it was entirely destroyed, and in 1853); but conditions have been prescribed by government for ensuring its protection against future conflagrations.

*Sattara*,—situate amidst the highlands of the Deccan, and where the country, though rugged, inclines to the eastward. The fort, on the summit of a steep mountain, has an area extending about 1,000 by 500 yards. The town lies immediately under it, in a valley.

*Saugor*,—built along the west, north, and north-east sides of a lake nearly a mile in length, and three-quarters in breadth, which occupies the lowest part of a valley, or rather basin, surrounded by hills. There is a large fort, now used as an ordnance depôt. The mint stood about a mile from the lake, but the business of the establishment has been transferred to Calcutta. In 1830, an iron suspension-bridge was erected over the Bessi, a river running near the town. Population, 70,000.

*Seringapatam*,—a celebrated fortress (built 700 years ago) and town, once the capital of Mysoor, situate on an island in the Cauvery. Town ill-built, having narrow streets; houses ill-ventilated and inconvenient: water supplied abundantly from the river, which washes the walls on the northern and south-west sides. Ground-plan, an irregular pentagon,  $1\frac{1}{2}$  m. by  $\frac{3}{4}$  of a m. Palace of Tippoo

Sultan within the fort, and is surrounded by a strong wall of stone and mud. The Shehr Ganguam, a suburb detached from the fortified town, was demolished by Tippoo on the eve of the investment of the place, but was afterwards built with considerable regularity. Population of the island, during his reign, estimated at 150,000; in 1800 it was only 31,895, exclusive of the garrison.

*Shikarpoor*.—The most important commercial town in Sind. It is situate 20 m. west of the Indus. A branch of the Sind canal passes within 1 m. of the city. Circuit of wall, which is now in ruins, 3,831 yards. The character of the place is thoroughly commercial, almost every house having a shop; mansions of the opulent Hindoo merchants large, inclosed and secluded by high brick walls; but the streets are narrow, and the houses generally small. The bazaar extends about 800 yards through the centre of the city, and contained, in 1837, 884, and in 1841, 923 shops. Transit trade important, as it is on the route to Afghanistan through the Bolan Pass. Population estimated at 30,000; viz., 20,000 Hindoos, and 10,000 Mohammedans, of whom 1,000 are Afghans. The town was founded in 1617.

*Surat*.—Outline of town an arc, nearly semicircular, the river forming the chord; circuit, about 6 m. Castle, though small, has bastions, covered way, and glacis; streets narrow and winding; houses high, upper stories projecting beyond the base. Population, in 1838, 133,544.

*Tanjore*.—Town consists of two forts; the greater, 4 m. in circumference, surrounded by a fortified wall and a ditch; streets within it irregularly built. Adjoining is the smaller fort, 1 m. in circuit, and very strong; within it is the great pagoda, considered to be the finest of the pyramidal temples of India.

*Trichinopoly*.—Rock very striking when viewed from a distance at any point, it being 600 ft. above the surrounding level. The fort is situate on part of the rugged declivity of the rock, and 2 furlongs from the Cauvery, which is embanked, but the works sometimes give way and inundate the country. The fort, with its strong and massive walls, bear the appearance of having been regularly and strongly built; they are from 20 to 30 ft. high, of considerable thickness, and upwards of 2 m. in circumference. Within is an extensive *petta* or town, arranged into tolerably straight, wide, and regular streets, many of which have bazaars. On the rock is a pagoda. The natives manufacture hardware, cutlery, jewellery, saddlery, and cheroots. The cantonment is from 2 to 3 m. south-west of the fort, and the troops generally there form a force of between 4,000 and 5,000 men.

*Umballa*.—On the route from Hindoostan to Afghanistan. It is a large walled town, situate in a level and highly cultivated country. Houses built of burnt brick, streets narrow. Fort at the N.E. of the town, and under its walls the encamping ground of the British troops.

*Vellore*.—A town in the Carnatic, with a strong extensive fort, on the south side of the Palar river; ramparts built of large stones, with bastions and round towers at short distances. A deep and wide ditch, cut in the rock, filled with water, surrounds the whole. Within are barracks, hospitals, magazines, and other buildings. Town situate between the fort and some rocky hills on the east, is clean and airy, and has an extensive and well-supplied bazaar. Most remarkable building, a pagoda dedicated to Crishna. Government, in 1846, sanctioned the erection of a church within the fort.

CLIMATE.—A country extending through six-and-twenty degrees of latitude, and with elevations from the coast-level to the height of three or four miles above the sea, must necessarily possess great variety of temperature. About one-half of India is inter-tropical, comprising within its limits the three principal stations of Calcutta, Madras, and Bombay; in fact, all the country south of a line drawn from Burdwan on the east, through Bhopal, to the gulf of Cutch on the west—a distance from Cape Comorin of about 1,000 miles. All the region north of this line, and extending 800 miles from Cutch to Peshawur, is outside the tropic of Cancer: the area of the inter and extra-tropical territory is nearly alike. Mere distance from the equator will not convey an adequate idea of the climate of any district: other circumstances must be taken into account; such as elevation above the sea,—aspect in reference to the sun and the prevailing winds,—more or less vegetation,—radiation of terrestrial heat,—quantity of rain falling,\* or siccidity of atmosphere,—proximity to snow-covered mountains or great lakes,—drainage, ventilation, &c.†—all these, varying in collateral existence or in degree of operation, cause a variety of climate and thermometrical range, which latitude will not indicate. Regions contiguous to the equator, at or near the sea-level, possess a high but equable temperature: the mercury, on Fahrenheit's scale, exhibits in the shade at Singapore, a flat island in  $1^{\circ} 17' N.$ , a heat of  $73^{\circ}$  to  $87^{\circ}$  throughout the year. As we recede from the equator north or south, a wider caloric range is experienced, not

\* The quantity of rain in the tropical or temperate zones is effected by the elevation of the land above the sea. In India the maximum fall is at 4,500 feet altitude; beyond this height it diminishes. This is shown by the present scientific chairman of the E. I. Co., Colonel Sykes, in his valuable *Meteorological Observations*: thus, on the western coast of India the fall is at sea-level (mean of seven levels)—inches, 81; at 150 ft. altitude (Rutnagherry in the Concan), 114; at 900 ft., Dapoolie (S. Concan), 134; at 1,700 ft. (Kundala Pass, from Bombay to Poona), 141; at 4,500 ft. (Mahabulishwar—mean of 15 years, 254; at 6,200 ft. (Augusta Peak, Utray Mullay range), 194; at 6,100 ft. (Kotagherry, in the Neilgherries, one year), 81; at 8,640 ft. (Dodabetta, highest point of Western India, one year), 101 inches. The same principle is observable in the arid lofty table-land of Thibet, and in the contiguous elevated regions where rain seldom falls. So also in Chili and other parts of the Andes. The distinguished meteorologist, Dr. John Fletcher Miller, of Whitehaven, adduces evidence, in his interesting account of the Cumberland Lake District, to demonstrate the existence of a similar law in England, where he considers the

only throughout the year, but within the limits of a single day. In the N. W. Provinces of India, and in the S.E. settlements of Australia, the mercury not unfrequently rises in the summer season to  $90^{\circ}$  and even  $100^{\circ}$  Fahr., and shows a fluctuation, in twenty-four hours, of  $24^{\circ}$ : but this extreme torridity—when the circumambient fluid seems to be aeriform fire—is but of brief duration. Animal and vegetable life are reinvigorated, for a large part of the year, by a considerably cooler atmosphere. Indeed, at New York and Montreal, I found the heat of June and July more intolerable than that of Jamaica or Ceylon; but then snow lies on the ground, at the former places, for several weeks in winter. Again, moisture with heat has a powerful and injurious effect on the human frame, though favourable to vegetation and to many species of animal life. Speaking from my own sensations, I have lain exhausted on a couch with the mercury at  $80^{\circ}$  Fahr., during the rainy season, in Calcutta, Bombay, and Hong Kong; and ridden through the burning forests of Australia, on the sandy Arabian plains, and over the sugar-cane plantations of Cuba, with the mercury at  $100^{\circ}$  Fahr. So, also, with reference to elevation: in the East and West Indies, at a height of several thousand feet above the sea, I have enjoyed a fire at night in June; and yet, in April and September, been scorched at mid-day in Egypt, Northern China, and Eastern Europe. These observations are made with a view of answering the oft-recurring inane question, without referring to any locality, "What sort of a climate has India?" In order, however, to

maximum fall of rain to be at the height of 2,000 feet.

† In 1829, I wrote and published in Calcutta a small brochure, entitled *The Effects of Climate, Food, and Drink on Man*. The essay was prepared in the hope of inducing the government to adopt sanitary measures for the drainage and ventilation of Calcutta, where cholera had become permanently located. I predicted that unless the *nidus* of this fearful malady were destroyed in the Indian cities by the purification of their respective atmospheres, the disease would be extensively generated and wafted with the periodical winds from Asia to Europe. The prognostication was ridiculed: sad experience may now perhaps induce corporations and citizens of large towns to adopt timely-effective sanitary measures. By so doing a healthy climate may everywhere be obtained; but no altitude or position will avail for the prevention of endemic diseases, or for lengthening the duration of life, wherever large masses of human beings are congregated, unless complete drainage, free circulation of air, and the removal of all putrescent animal and vegetable matter be made an urgent and daily duty.

TEMPERATURE & RAIN-FALL AT DIFFERENT DISTRICTS IN INDIA. 487

convey some idea of the thermometrical | different stations, the following table has  
range, and the quantity of rain falling at | been collated from different sources:—

*Meteorological Monthly Observations for different parts of India; showing the Latitude, number of feet  
above the level of the sea, average Thermometer, and Rain in inches.*

Places, Latitude, and Ele- vation above sea.	THERMOMETER.												Mean of Year.
	Jan.	Feb.	March	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Calcutta, 22° 34', 18 ft. . .	69	73	78	87	88	83	82	82	82	82	71	67	79*
Madras, 13° 5', sea-level . .	78	78	82	88	92	87	88	86	86	84	82	78	83
Bombay, 18° 57', sea-level †	77	77	80	82	85	85	81	84	79	84	84	80	84
Tirhoot, 25° 26', 26° 42', little elevated . . . . .	60	66	76	85	89	86	84	85	81	73	—	61	78
Goorgaon, 28° 28', 817 ft. . .	70	72	80	—	104	98	85	84	89	87	75	66	—
Delhi, 28° 41', 800 ft. . . .	53	62	70	79	82	82	82	80	80	73	62	56	72
Rajpootana, ‡ about 500 ft.	70	73	82	82	74	90	85	—	—	—	90	66	—
Nagpoor, 21° 10', 930 ft. . .	68	75	83	89	90	84	79	79	79	79	73	72	79
Hyderabad, 17° 22', 1,800 ft.	74½	76½	84	91½	93	88	81	80½	79	80	76½	74½	81½
Bangalore, 12° 58', 3,000 ft.	71	73	79	78	79	75	74	74	74	71	71	70	74
Hawilbagh, 29° 38', 3,887 ft.	47	55	61	60	73	76	78	79	75	69	60	52	—
Kotagherry, 11° 27', 6,100 ft.	69	60	61	62	62	64	64	65	64	62	60	59	61
Ootacamund, 11° 24', 7,300 ft.	54	56	60	64	64	59	56	56	56	56	55	53	57
Mussoorie, 30° 27', 6,282 ft.	—	—	—	—	77	70	68	68	67	61	56	—	—
Landour, 30° 27', 7,579 ft. .	41	46	55	65	68	66	68	66	64	57	46	47	—
Darjeeling, 27° 2', 8,000 ft.	40	42	50	55	57	61	61	61	59	58	50	43	53

	RAIN IN INCHES.												Total.
	Jan.	Feb.	March	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Calcutta . . . . .	0.05	0.48	1.77	3.52	12.86	3.04	12.44	8.15	8.19	3.68	0.06	2.57	56.61
Nagpoor . . . . .	0.40	0.50	3.84	1.01	0.21	6.25	14.93	7.51	16.32	—	2.89	0.13	53.99½
Bangalore . . . . .	—	—	35	4.16	5.89	3.24	5.88	4.13	13.97	5.10	1.30	—	—
Kotagherry . . . . .	2	3	6	10	2	2	4	2	2	10	2	5	50
Ootacamund . . . . .	1	1	2	5	6	8	7	6	7	9	5	3	60
Darjeeling . . . . .	1	—	1	2	9	26	25	29	15	8	—	—	122

The monsoons or prevailing winds within the tropics, as on the Coromandel and Malabar coasts, are denominated the *South-west* and the *North-east*; but owing to modifying circumstances, the direction is in several places changed: at Arracan, the S.W. blows more frequently from the S., and the N.E. more to the W. of N. Lower Bengal, including the country around Calcutta, has a climate more trying than that of any other part of India. November, December, and January are tolerably cool, and Europeans may walk out during the day. In February, March, April, and May, the heat daily

increases, until, during the last month especially, it becomes almost intolerable; not a cloud appears in the heavens to mitigate the burning rays of the sun, which seem to penetrate into the very marrow of an European. I have known men and beasts to drop dead in the streets of Calcutta. When the monsoon is on the eve of changing, before the *chota bursaut* (little rain) set in, the nights as well as the days are oppressive; respiration becomes laborious, and all animated nature languishes: the horizon assumes a lurid glare, deepening to a fiery red; the death-like stillness of the

\* Abstract of the mean annual summaries of a meteorological register kept at Calcutta, for ten years:—

Years.	Sunrise.	2:40 P.M.	Sunset.
1841 . . . . .	72.7	89.0	82.4
1842 . . . . .	73.3	88.0	82.1
1843 . . . . .	73.3	87.6	82.5
1844 . . . . .	72.7	87.6	82.3
1845 . . . . .	73.7	86.9	82.3
1846 . . . . .	74.3	86.3	81.9
1847 . . . . .	73.2	86.1	81.1
1848 . . . . .	74.1	87.4	82.5
1849 . . . . .	73.6	86.7	81.8
1850 . . . . .	73.1	86.1	81.4
Mean . . . . .	73.4	87.2	82.0

The annual fall of rain at Calcutta, during six years, commencing with 1830, averaged 64 inches. In the wet season evaporation is very slight.

† Amount of rain at Bombay for six years:—

Inches.	Inches.
1845 . . . . . 54.73	1848 . . . . . 73.42
1846 . . . . . 87.48	1849 . . . . . 118.88
1847 . . . . . 67.31	1850 . . . . . 47.78

Average annual fall during thirty years, 76.08 inches. At Madras, average for eight years, 66.59 inches.

‡ Between lat. 26° 54', and lat. 29° 23'.—(Boileau's *Tour in Rajwara*, pp. 304—317.)

§ Situation, about 350 m. from nearest part of Bay of Bengal, and 420 m. from Indian Ocean. In 1826, and in 1831, the fall of rain slightly exceeded 65 inches; the greatest registered fall was 72 inches, and that was in 1809. Average fall of rain for eight years, 48.10 inches. Proceeding westward towards the Ghauts and Indian Ocean, the rains become heavier until reaching Mahabulishwar, where the fall is probably unexampled in amount; in 1849 it was 294 inches. The mean annual quantity is 239 inches, of which 227 fell in the four monsoon months. The greatest annual fall was in 1834, when it amounted to 297 inches. Another report gives the mean annual fall, as deduced from the observation of ten years, at 229 inches; and the number of days on which rain falls, at 127.

air is occasionally broken by a low murmuring, which is responded to by the moaning of cattle: dense, dark masses of clouds roll along the Bay of Bengal, accompanied with occasional gusts of wind; streaks of lightning, after sunset, glimmer through the magazines where the electric fluid is engendered and pent up; the sky becomes obscured with mist, and lowering; next, broad sheets of lambent flame illumine each pitchy mass, until the entire heavens seem to be in a blaze; while peal after peal of thunder reverberates from cloud to cloud, like discharges of heavy artillery booming through cavernous hills, or along an amphitheatre of mountains; thin spray is scattered over the coast by the violence of the increasing gale,—the rain commences in large drops, augments to sheeted masses, and sweeps like a torrent from the sky; the surf roars along the beach,—the wind howls furiously, screaming or groaning piteously; and every element seems convulsed with the furious conflict: at length the S.W. monsoon gains the victory, and the atmosphere becomes purified and tranquil. The monsoon is felt with varying degrees of intensity at different parts of the coast; but at Madras and at Bombay the scene is one of awful grandeur. During the rains the air is saturated with moisture; and the pressure on each square inch of the human frame causes extreme lassitude and mental depression: along the sea-shore the pernicious effects are mitigated by a sea-breeze, called the "Doctor," which sets in about ten, A.M., and lasts until sunset. As the country is ascended above the ocean-level, varieties of climate are experienced; but on the plains of the Ganges and of the Indus, and in some parts of Central India, hot winds blow nearly equal in intensity to those which are felt in Australia. In few words, some idea may be conveyed of the climate of several districts:—

*Bengal Proper*,—hot, moist, or muggy for eight months—April to November; remainder cool, clear, and bracing.

*Bahar*,—cool in winter months: hot in summer; rain variable.

*Oude*,—fluctuating temperature and moisture; therm. range 28 to 112°; rain, 30 to 80 inches.

*Benares*,—mean temperature, 77°; winter cool and frosty sometimes; therm. at night, 45°, but in the day, 100°; rain variable—30 to 80 inches.

*Agra*,—has a wide range of temperature; in mid-winter night-frosts and hail-storms sometimes cut off the cotton crop and cover the tanks with ice; yet at noon in April, therm. reaches the height of 106° in the shade.

*Ghazee poor*,—range in coldest months, 58 to 71°—April, 86 to 96°; May, 86 to 95°; June, 85 to 98°; July, 86 to 96°. In the *Dehra Doon*—range 37 to 101°. In the year 1841, December mean heat, 60°; June, 88°; whole year, 74°. In 1839, total fall of rain, 67 inches; of which in July, 15; August, 26.

*Cuttack* and opposite coast of Bay of Bengal,—refreshed by a sea-breeze blowing continuously from March to July.

*Berar*,—moderate climate, according to elevation.

*Madras*,—cold season of short duration in the Carnatic. Mercury in therm. higher than in Bengal, sometimes 100° Fahr. Heat tempered by the sea.

*Arcot*,—high temperature, 110° in the shade, sometimes 130° Fahr. Few sudden vicissitudes; storms infrequent.

*Salem*,—fluctuating climate—in January, 58 to 82°; March, 66 to 95°; May, 75 to 96°.

*Trichinopoly*,—has a steady high temperature, a cloudless sky, dry and close atmosphere, with much glare and intense radiation of heat.

*Vizagapatam*,—on the coast is hot, moist, and relaxing; inland equally sultry, but drier.

*Bellary* is characterised by great aridity; rain, 12 to 26 inches; therm. falls in January to 55 or 50°; thunder-storms frequent in summer months.

*Cuddapah*,—average max. temperature for several years (in the shade), 98°; minn., 65°; mean, 81°: mean temperature during monsoon, 77°; max., 89°.

*Madura*,—on the hills mild and genial in summer; therm. seldom below 50° or above 75°; in the plains, reaching 115° and even 130°.

*Travancore*,—owing to proximity of mountains, humid but not oppressive.

*Mysoor*,—table-land cool, dry, and healthy; at Bangalore (3,000 ft. high), therm. range from 56 to 82°. The monsoons which deluge the Malabar and Coromandel coasts, have their force broken by the Ghauts on either side, and genial showers preserve the Mysorean verdure throughout the year.

*Neilgherries*,—the climate resembles that of the intertropical plateaux of America; at Ootacamund (height 7,300 ft.), mean temperature rather above that of London, but ann. range very small; not sufficient sunshine to bring the finer European fruits to perfection, but corn and vegetables thrive. Lower down the vales enjoy an Italian clime; at Coimbatore (height 4,483 ft.), during the cold season, max., 59°; minn., 31°; in April, average 65°; May, 64° Fahr.; there are no sultry nights, a blanket being acceptable as bed-covering in all seasons. In the higher regions, the air beyond the zone of clouds and mists is clear and dry, as evidenced by the great distance within which sound is heard, and by the buoyancy of the human frame.

*Coorg* is a bracing mountain region. Daily range, 2 to 6°; ann., 50 to 80° Fahr.; annual rain, at Mercara (4,500 ft.), 119 inches; in June, about 40 inches.

*Malabar coast*,—warm but agreeable; therm. 68 to 88° Fahr.; ann. rain, 120 to 130 inches.

*Canara and the Concans*,—beneath the Ghauts are not, tropically speaking, unhealthy, except where marsh and jungle prevail, when malaria is produced.

*Bombay*,—tropical heat diminished by sea-breezes.

*Broach*,—December to March, cool; average rain, 33 inches.

In *Guzerat*, which is the hottest part of W. India, the westerly winds are burning in May, June, and July; temperature high for nine months; average fall of rain, 30 inches.

*Mahratta* country,—near the Ghauts the clouds are attracted from the Indian Ocean, and a profusion of rain falls for three or four weeks without intermission, but often not extending 30 m. to the E. or S.

The *Deccan* table-land is salubrious; at Sattara, mean ann. temperature, 66°. Even in September I enjoyed the air of Poona, as a great relief from the sultry heat of Southern China. Ann. range of therm., 37 to 94°; fall of rain, light and uncertain—22 to 30 inches; among the Ghauts, 300 inches. Proceeding westward towards the Ganges, and northward through *Central India* plateau, there is a modified temperature (at Meerut, therm. falls to 32° Fahr.), with occasional hot winds, which prevail as far as Sindé and the Punjab. Sindé is dry and sultry; at Kurachee, 6 or 8 inches rain; at Hydrabad, 2 inches; at Larkhana, farther north, there was no rain for three years. Mean max. temperature of six hottest months, 98° in the shade.

*Punjab*,—more temperate than Upper Gangetic plain; from November to April, climate fine; summer heat, intense; hot winds blow with great violence, and frequent dust-storms in May and June render the air almost unbreathable. Rains commence in July; August and September, sickly months. The Great Desert to the S. of the Punjab has a comparatively low temperature; at Bickaneer, in winter, ponds are frozen over in February; but in summer the heat is very great; therm. 110 to 120° in the shade.

*Cundeish* has a luxurious climate like that of Malwa.

*Upper Assam* has a delightful temperature; the heat bearable, and the cold never intolerable. Mean temperature of four hottest months, about 80°; of winter, 57°; mean ann., 67°; heavy rains, which commence in March and continue to October. The quantity which falls is unequal; at Gowhatty, it is about 80; at Chirra Poonjee, 200; and in the Cossya country, 500 to 600 inches = 50 ft. At this latter place there fell in 1850, no less than 502 inches = 42 ft.; in August, 1841, there were 264 inches = 22 ft., in five successive days—30 inches every 24 hours. [Let it be remembered that the *annual* fall in London is 27; in Edinburgh, 24; in Glasgow, 32 inches.] The eastern side of the Bay of Bengal, to the Straits of Malacca, is more genial and agreeable than that of the Coromandel coast: the greatest heat is in April; therm., at Mergui, 100°; the monsoon is mild, but violent to the northward.

*Lower Assam and Arracan* are similar to Bengal.

This rapid sketch will indicate the variety of climates in India; but it is in the loftier adjoining regions that the greatest extremes exist.

The *Himalaya and Hindoo-Koosh* slopes and valleys exhibit a very varied temperature, and corresponding diversity of products, from the loftiest forest trees to the stunted lichens and mosses, when the last trace of vegetable life disappears as effectually as it does at the Arctic or Antarctic Poles, snow being equally perpetual at an elevation of four to five miles (20,840 to 25,000 ft.) above the sea, as at the extreme northern and southern parts of our globe. On the southern, or Indo-Gangetic side of the Himalaya, which rises like a wall from the sub-Himalaya, the snow-line commences at 12,000 to 13,000 ft. on some of the spurs or buttresses; on the northern side of the same range,—table-land of Tibet 10,000 ft. above the sea; the snow-line commences at 16,000 ft., but in some places is

not found at 20,000 ft. On the southern slope cultivation ceases at 10,000 ft.; but on the northern side, cultivation extends to 14,000 ft., where birch-trees flourish; the limit of furze-bushes is at 17,000 ft. Vegetation, to some extent, indicates the more or less severity of this mountain climate: the *Deodar* has its favourite abode at 7,000 to 12,000 ft.—attains a circumference of 30 ft., and of great stature, and the wood will last, exposed to the weather, for 400 years. Various species of magnificent pines have a range of 5,000 to 12,000 ft.; the arboraceous rhododendron, every branchlet terminated by a gorgeous bunch of crimson flowers, spreads at 5,000 to 8,000 ft.; the horse-chestnut and yew commence at 6,000 ft., and end at 10,000 ft.; the oak flourishes at 7,000 to 8,000 ft.; maple, at 10,000 to 11,000 ft.; ash, poplar, willow, rose, cytissus, at 12,000; elm, at 7,000 to 10,000; birch commences at 10,000, ceases on S. slope at 13,000 ft.; on N. side fine forests of this tree at 14,000 ft. Juniper met with occasionally at latter-named height; the grape attains great excellence at Koonawur, 8,000 ft., but does not ripen beyond 9,000 ft.; the currant thrives at 8,000 and 9,000 ft.; apricot, at 11,000 ft.; gooseberry and raspberry, at 10,000 to 12,000 ft.

The decrement of heat in proportion to latitude and elevation is, as yet, imperfectly ascertained. Dr. Hooker\* allows one degree of Fahrenheit's thermometer for every degree of latitude and every 300 ft. of ascent above the sea; at Calcutta, in 22° 34', the mean ann. temperature is about 79°; that of Darjeeling, in Sikhim, 27° 2'; 7,450 ft. above Calcutta, is 53°, about 26° below the heat of Calcutta. The decrease of temperature with elevation is much less in summer than in winter: in January, 1° = 250 ft., between 7,000 and 13,000 ft.; in July, 1° = 400 ft.; the decrement also less by day than by night. The decremental proportions of heat to height is roughly indicated by this skilful meteorologist—

1° = 300 ft.	at elevation	1,000 to 8,000 ft.
1° = 320 ft.	"	8,000 to 10,000 ft.
1° = 350 ft.	"	10,000 to 14,000 ft.
1° = 400 ft.	"	14,000 to 18,000 ft.

This must be effected by aspect and slope of elevation; by quantity of rain falling, and permeability of soil to moisture; by amount of cloud and sunshine, exposure of surface, absence of trees, undulation of the land, terrestrial radiation, and other local influences.

Within the tropics, in the northern hemisphere, the limits of perpetual congelation is 16,000 to 17,000 ft. above the sea; in lat. 30°, 14,000 ft.; in 40°, 10,000 ft.; in 50°, 6,000 ft.; in 60°, 5,000 ft.; in 70°, 1,000 ft.; and in 80° and further north, at the sea-level. In the southern hemisphere, Georgia, which is in lat. 56°, exhibits perpetual frost.

At Kumaon, winter rigour is moderated by great solar radiation, and somewhat tempered by contiguous snow-capped mountains, whence a diurnal current of air sets in as regularly as a sea-breeze on a tropical shore, and with a nearly equally invigorating effect. Snow commences to fall at the end of September, and continues until the beginning of April. During the absence of snow for five months, the mercury ranges at sunrise, 40 to 55°; at mid-day, 65 to 75° in the shade—90 to 110° Fahr. in the sun. The heat of course diminishes as height increases, except during the cold season. At Almora town, in 29° 30', 5,400 ft. elevation, the therm. before

\* In his valuable work, *Himalayan Journals*, ii., 404.

sunrise is always lowest in the valleys, and the frost more intense than on the hills of 7,000 ft. elevation, while at noon the sun is more powerful; extreme range in 24 hours, sometimes from 18 to 51° Fahr. Snow does not fall equally in every season; the natives say the greatest fall is every third year. On the Ghagor range, between Almora and the plains, snow remains so late as the month of May. At Mussoorie, 6,000 to 7,000 ft. high, the mean ann. heat is only 57° Fahr.; indeed, at 4,000 ft. hot winds cease, and vegetation assumes an European character. Annual fall of rain at Almora, 40 to 50 inches.

The northernmost part of Nepal valley, between 27 and 28°, and elevation of 4,000 ft., has a climate somewhat similar to that of the southern parts of Europe. In winter a hoar-frost commonly covers the ground, occasionally for three or four months, freezing the standing pools and tanks, but not severe enough to arrest the flow of rivers. In summer noon, the mercury stands at 80 to 87° Fahr. The seasons are very nearly like those of Upper Hindoostan; the rains set in earlier, and from the S.E. are usually very copious, and break up about October, causing excessive inundations in some places from the mountain torrents. In a few hours, the inhabitants, by ascending the sides of the enclosing mountains, may exchange a Bengal heat for a Siberian winter.

At Darjeeling the atmosphere is relatively more humid than at Calcutta; the belt of sandy and grassy land, at the foot of the Himalaya, only 300 ft. higher than in Calcutta, and 3½° N. of that city, is, during the spring months, March and April, 6 or 7° colder; and though there is absolutely less moisture in the air, it is relatively more humid; this is reversed after the rains commence. The south wind, which brings all the moisture from the Bay of Bengal, discharges annually 60 to 80 inches of rain in traversing 200 m. of land; but the temperature is higher in advancing north-west from the Bay of Bengal: which may be caused from the absence of any great elevation in the Gangetic valley and plain, and its being walled in to the northward by the Himalaya mountains.

Elevation causes in Afghanistan a corresponding diversity of climate: at Cabool, which is considered to be very salubrious, and 6,396 ft. above the sea, the air is warmer in summer and colder in winter than that of England; and the diurnal therm. range is great, amounting to 40°. June, July, and August are the hottest; December, January, and February the coldest months,—the mercury falling several degrees below zero Fahr.; but the sun possesses sufficient power at mid-day to melt the surface of the snow, which, however, is again frozen at night. The seasons are very regular; the sky is unclouded, the air bright and clear, with scarcely any rain; in November a few showers are followed by snow; and from the middle of March till the 1st of May, there is incessant rain, which melts the snow rapidly, and causes a sudden transition from winter to summer (with but little spring), when thunder and hail-storms occur; earthquakes are not unfrequent during winter in the immediate vicinity of the lofty ranges, but are said to be unknown at Candahar. Prevailing winds, N.N.W. and W.; E. seldom; winter, calm; variable at breaking up of the season.\*

\* Notes of observations, 1st April, 1838, to 31st March, 1840, in Afghanistan.—(*Calcutta Jour. Nat. Hist.*)

† The Chooria district (valley of the Pabur, 4,800 feet)

*Cashmere* valley, by its elevation (5,000 ft.), has a cool climate; in winter the celebrated lake is slightly frozen over, and the ground covered with snow to the depth of 2 ft.; hottest months, July and August, therm. 80 to 85° at noon, when the air is sometimes oppressive from want of circulation.

But it is in the loftier regions that the peculiarities caused by altitude are most observable: at—

*Bussahir*,—the climate varies from that of the intertropical at Rampoor, 3,260 ft.† above the sea, to that of the region of perpetual congelation: in parts bordering on the table-land of Tartary the air is at one season characterised by aridity greater than that of the most scorching parts of the torrid zone. In October, and later in the year, when the winds blow with the greatest violence, woodwork shrinks and warps, and leather and paper curl up as if held to a fire; the human body exposed to those arid winds in a few minutes show the surface collapsed, and if long left in this condition life becomes extinct. Vegetation with difficulty struggles against their effects. Gerard found tracts exposed to them to have a most desolate and dreary aspect; not a single tree, or blade of green grass, was distinguishable for near 30 m., the ground being covered with a very prickly plant, which greatly resembled furze in its withered state. This shrub was almost black, seeming as if burnt; and the leaves were so much parched from the arid winds of Tartary, that they might be ground to powder by rubbing them between the hands. Those winds are generally as violent as hurricanes, rendering it difficult for the traveller to keep his feet. The uniform reports of the inhabitants represent the year as continual sunshine, except during March and April, when there are some showers, and a few clouds hang about the highest mountains; but a heavy fall of rain or snow is almost unknown. The excessive cold and aridity on the most elevated summits cause the snow to be there so light, loose, and powdery, that it is continually swept like smoke through the air by the tempestuous winds. The limit of perpetual congelation in Bussahir ascends to the northward.

The direct rays of the sun are extremely hot at great elevations: insomuch, that Jacquemont found the stones on the ground on the table-land of Tartary, at an elevation of 15,000 or 16,000 ft., become so hot in sunshine, as to be nearly unbearable by the hand; at an elevation of 18,000 ft., Gerard found the rays of the sun so oppressive that he was obliged to wrap his face in a blanket.

At *Bulti* or *Little Tibet* the atmosphere is very clear and dry. But though rain is almost unknown, snow falls, and lies from the depth of 1 to 2 ft. The cold in the elevated parts is intense in winter; on the high and unsheltered table-land of Deotsuh, it at that season totally precludes the existence of animal life. The heat in the lower parts in summer is considerable, the therm.‡ ranging from 70 to 90° in the shade at noon.

At *Ladakh* the climate is characterised by cold and excessive aridity. The snow-line is so usually high in Spiti and Ruphsu, at the south-eastern extremity of Ladakh, as to show the utter futility of attempting to theorise respecting the so-called isothermal lines, in the present scanty and imperfect state of our information as to the data from a beautiful and fertile tract, with a delightful climate.

‡ Thornton's *Gazetteer: Afghanistan, &c.*, vol. i., p. 120.



which they should be determined. Gerard says, respecting Spiti, in lat. 32°, that the marginal limit of the snow, which, upon the sides of Chimborazo, occurs at 15,700 ft., is scarcely permanent in Thibet at 19,000, and upon the southward aspect has no well-defined boundary at 21,000 ft.; and one summit, 22,000 ft. high, was seen by him to be free of snow on the last day in August. This absence of snow probably results, in part, from the very small quantity of moisture kept suspended in the highly rarefied atmosphere, in part from the intense heat of the direct rays of the sun, the latter cause being in some degree dependent on the former. "Wherever we go," observes Gerard, "we find the sun's rays oppressive." In one instance, in the beginning of September, at an elevation of 15,500 ft., a thermometer, resting upon the rocks, marked 158°; in another, at 14,500 ft., the instrument, placed on sand, marked 130°; and in a small tent, at an elevation of 13,000 ft., it indicated 110°. These phenomena he attributed to the rarefaction and tenuity of the atmosphere, from elevation and the absence of moisture,—circumstances which allow of such immediate radiation of heat, that at the same moment there will be a difference of more than 100° between places only a few hundred yards asunder, occasioned by the one receiving, and the other being excluded, from the direct rays of the sun. At Ruphsu, at the elevation of 16,000 ft., it freezes every night, even at Midsummer; but the heat of the day so far countervails the cold of night, that the Lake Chamorereil is free from ice during the summer months. At Le, having an elevation of about 10,000 ft., frosts, with snow and sleet, commence early in September and continue until May; the therm. from the middle of December to February, ranges from 10 to 20°; even in June, the rivulets are often, at night, coated with ice. Moorcroft, during his Himalayan travels, found the therm., when exposed to the sun's rays at mid-day in July, to range from 134 to 144°. The atmosphere is in general dry in all parts of the country.

In the works of Gerard, Lloyd, Moorcroft, Vigue, Jacquemont, and Hooker, useful details are given on the meteorology of these lofty regions.

The climate of India is not inimical to the European constitution: that of Bengal and other low districts is very trying, especially to those who do not follow a strictly temperate course in all things; but there are many instances of Englishmen living for a quarter of a century at Calcutta, and on returning to England, enjoying another quarter of a century of existence, preserving, to old age, a vigorous mental and bodily frame.\* In the hot and moist parts of India, abdominal diseases,—in the warm and dry, hepatic action or congestion prevail. Exposure at night, especially to malaria or the effluvia arising from intense heat and decomposing vegetable and animal matter, causes a bilious remittent (popularly called

jungle fever), which operates as a poison on the human system, and becomes rapidly fatal if not counteracted by mercury or some other poison, or unless the morbid matter be expelled, and the patient have strength of frame to survive the fever.

The direct rays of a nearly vertical sun, and even those also of the moon, cause affections of the brain which are frequently fatal; and when not so, require removal to the temperate zone for their relief. The establishment of sanatoria at elevated and healthy positions, has proved a great benefit to Anglo-Indians, who at Darjeeling, Simla, Landour, Mussoorie, Mount Aboo, the Neilgherries, and other places, are enabled to enjoy a European temperature and exercise,—to check the drain on the system from the cutaneous pores being always open,—to brace the fibres and tone the nerves, which become gradually relaxed by the long continuance of a high temperature. As India becomes more clear and cultivated, and facilities for locomotion by railroads and steam-boats are augmented, the health of Europeans will improve, and their progeny will derive a proportionate benefit: but it is doubtful whether there is any part of the country where a European colony would *permanently* thrive, so as to preserve for successive generations the stamina and energy of the northern races.

The diseases that prevail among the Indians vary with locality: low, continued fever is most prevalent in flat, and rheumatism in moist regions. Leprosy and other skin disorders are numerous among the poorest classes. *Elephantiasis*, or swelling of the legs; *berri-berri*, or enlargement of the spleen; torpidity of the liver, weakness of the lungs, and ophthalmia, are common to all ranks and places: goitre is found among the hill tribes; cholera and influenza sometimes decimate large masses of the people. Numerous maladies, engendered by early and excessive sensuality, exist among rich and poor, and medical or chirurgical skill are consequently everywhere in great request. The inhabitants of India, generally speaking, except in the more elevated districts, have not the robust frames or well-wearing constitutions which result from an improved social state, or from the barbarism which is as yet free from the vices and defects of an imperfect civilisation: the inhabitants of the torrid zone do not enjoy a longevity equal to those who dwell in the temperate climates of the earth.

\* Mr. W. C. Blaquiere, for a long period police magistrate at Calcutta, died there in 1854, æt. 95: he arrived at Bengal in 1774.

**GEOLOGY.**—It will require many more years of scientific research before an accurate geological map can be laid down for India.\* Immense tracts covered with impenetrable forests,—the few Europeans in the country occupied with military and civil governmental duties,—the lassitude of mind and body which, sooner or later, oppresses the most energetic,—and the malaria which inevitably destroys those who attempt to investigate the crust of the earth, overrun with jungle, or immersed in swamp;—these, and other obstacles render the prosecution of this science a matter of extreme difficulty. All that can be attempted in a work of this nature is to collate the best known data, and arrange them in outline, for reference and future systematic exposition.†

Rerepresentatives of all the series found in Europe and other parts of the world, are traceable in India. Mr. Carter has industriously noted the observations of various investigators; and the following summary is partly abstracted from his compilation:—

**OLDER METAMORPHIC STRATA.**—*Gneiss, Mica Schiste, Chlorite Schiste, Hornblende Schiste, Quartz Rock, Micaceous Slate, Talcose Slate, Clay Slate, Granular Limestone.*

*Gneiss.*—Most general and abundant,—occurring in different parts of the Himalaya; Oodeypoor; near Baroda; Zillah Bahar; Rajmahal hills; Phoonda Ghaut; Northern Circars; and more or less throughout “peninsula” (? Deccan) to the Palghaut, and probably to Cape Comorin: it is frequently veined by granite, contains in most places specular iron ore: beds of garnets common everywhere; corundum in southern India, and beryl in Mysoor. Composition varied in texture, compactness, and with more or less mica; colour—speckled, black, brown, reddish gray to white; sometimes tinted green where chlorite replaces mica: when very fine-grained and decomposing, gneiss bears a close resemblance to fine-grained sandstone.

*Mica Schiste.*—Southern Mahratta country, and western extremities of Vindhya range, passes into micaceous slate at the Phoonda Ghaut: veined with quartz, but no granite: being associated with gneiss and hornblende schistes, they pass into each other.

*Chlorite Schiste.*—Southern Mahratta country: it also contains garnets.

\* The late eminent geologist, J. B. Greenough, has made an excellent beginning by his large map on this subject, and by the voluminous materials he collected.

† See a valuable *Summary of the Geology of India, between the Ganges, the Indus, and Cape Comorin*; by H. J. Carter, Asst. Surg. Bombay Establishment, Aug., 1853: reprinted from *Journal of Bombay British Asiatic Society*, p. 156.

‡ In the neighbourhood of Calcutta a series of boring experiments to find water, were carried on at intervals between 1804 and 1833; the results were—artificial soil at surface; next, as follows: a light blue or gray-coloured sandy clay, becoming gradually darker from decayed vegetable matter, until it passes at 30 ft. deep into a 2 ft. stratum of black peat, apparently formed by the *debris* of Sunderbund vegetation, which was once the delta of the

*Hornblende Schiste*, forms the sides of the Neilgherries, where it is from five to seven miles in breadth; garnets found in it. Southern Mahratta country, Salem; and often passes into mica schiste on the Malabar coast.

*Quartz Rock.*—Hills between Delhi and Alwur, and between Ajmere and Oodeypoor; mountains around Deybur Lake, Chittoor, and at the western part of the Vindhya range, with mica slate; southern Mahratta country; more or less in the granitic plains of Hyderabad, and in the *droogs* of Mysoor. The rock is compact and granular in the Ajmere mountains; and of a red, violet, gray, or brown colour; brilliantly white in the Mahratta country. Mica is frequently disseminated throughout the rock in large masses; talc and chlorite, occasionally.

*Micaceous Slate and Chlorite Slate.*—Both at the Phoonda Ghaut; and the latter in the Mahratta country. The micaceous occurs in the Indo-Gangetic chain, Koonawur; and in the Soolumbur range, Oodeypoor.

*Clay Slate*, appears to be of great thickness, and considerable extent, viz., from the Arravulli range, the lower part of which is composed of this formation; thence to Oodeypoor, *viâ* the Soolumbur range, across the Durgawud valley to Malwa, on the Kistnah; southern Mahratta country, Nellore; and in the Eastern Ghauts at Jungamanipenta, a ferruginous clay-slate overlies the trap at Mahabulishwar. In the Arravulli it is massive, compact, and of a dark blue colour. The Soolumbur range is almost entirely composed of this and chlorite slates. Micaceous passes into clay-slate at the Phoonda, and, farther south, the Saltoor passes (Western Ghauts.) This also occurs at the Carrackpoor hills (Bahar), where the clay-slate is about twenty miles wide, and extends in the direction of the strata.‡

**PLUTONIC ROCKS.**—*Granite, Diorite or Greenstone.*

*Granite.*—Himalaya; Ajmere and around Jeypoor, traversing the mountains in veins and dykes; the Arravulli range consists chiefly of granite, resting on slate; Mount Aboo; from Balmeer across the sands to Nuggur Parkur; the Gir; Girnar; between Oodeypoor and Malwa, are all varieties: it extends more or less southward to the Nerbudda; on that river between Mundela and Amarkantak, Jubbulpore, Kalleenjor, Zillah Bahar, Carrackpoor hills; in Bhaulpore and Monghyr districts; near Baitool; Nagpore territory; Cuttack; Orissa; Northern Circars; Hyderabad; between the Kistnah and Godavery; Gooty; Neilgherries; Malabar coast at Vingorla; Coromandel; between Madras and Pondicherry; ending at Cape Comorin. The granitic rocks vary in structure and composition, as they do in colour: thus there are *syenitic, pegmatitic, and protogenic*. It is gray at Ramteak in Nagpore, red generally in

Ganges; below the peat a black clay, and in this and the gray clay immediately above the peat, logs and branches of yellow and red wood, found in a more or less decayed state. In one instance only bones were discovered, at 28 ft. deep. Under blue clays, at 50 to 70 ft. deep, *kunkur* and *bagiri* (apparently small land shells, as seen in Upper India.) At 70 ft. a seam of loose reddish sand,—75 to 125 ft. beds of yellow clay predominate, frequently stiff and pure like potter's clay, but generally mixed with sand and mica: horizontal strata of *kunkur* pass through it, resembling exactly those found at Midnapoor. Below 128 ft. a more sandy yellow clay prevails, which gradually changes to a gray, loose sand, becoming coarser in quality to the lowest depth yet reached (176 ft.), where it contains angular fragments, as large as peas, of quartz and felspar.

the Deccan, but at Vencatigherry (Mysoor), and at Vingorla, gray: in the Neilgherries it is syenitic.

*Greenstone.*—Hazareebagh, Mahratta country, Mysoor, Nellore, Chingleput, Madras, Trichinopoly, Salem, in the granitic plains of Hydrabad; and extensively throughout Southern India. In the Deccan the dykes may be traced continuously for twenty miles; about Hydrabad they are from 100 to 300 feet broad; about four miles from Dhonee, between Gooty and Kurnool, there is one 150 feet high, and 200 feet broad, passing through a range of sandstone and limestone mountains.

**SILURIAN ROCKS.**—*Greywacke.*—Ghiddore, Rajmahal hills; Kumaon. It is a quartzose sandstone; yellow colour, resinous lustre, and compact splintery fracture.

*Transition or Cambrian Gneiss*, is of great extent in Bhagulpoore district, composing two-thirds of the country between the Curruckpore and Rajmahal hills, and the greater portion of the southern ridges of the latter group. It consists of quartz, more or less, hornblende, felspar, mica, and garnet pebbles.

**OOLITIC.**—*Limestone.*—Cutch; near Neemuch, Malwa; Bundelcund; on the river Sone; Firozabad, on the Bheema; Kuladgee, in the southern Mahratta country; on the Kistnah; and as far south as Cuddapah. Though its principal characters are its uniform lithographic texture, solidity, conchoidal smooth fracture, and hardness,—dendritic surface, smoky gray colour, passing into dark smoky blue; and parallel thin stratification,—it differs when departing from its general composition, just as the shales differ which interlaminate it, the coal strata, and the sandstone, as being more or less argillaceous, bituminous, or quartziferous; of different degrees of hardness, coarseness, and friability of structure; and of all kinds of colours, streaked and variegated. It is occasionally veined, and interlined with jasper and light-coloured cherts, which, near Cuddapah, give it a rough appearance; also contains drusy cavities, calcedonies, and cornelian, north of Nagpoor: in the bed of the Nerbudda between Lamaita and Beragurh, near Jubbulpoor, of a snow-white colour, and traversed by chlorite schiste. It is frequently denuded of its overlying sandstone and shales in Southern India, and in this state is not uncommonly covered by trap, as near Ferozabad on the Bheema.

Thickness, 310 feet near Kurnool; 10 to 30 feet on the Bheema, with strata from 2 inches to 2 feet thick. In the part of the Himalaya examined by Captain Strachey, the secondary limestones and shales were several thousand feet in thickness, the upper portion being in some places almost made up of fragments of shells.

If the white crystalline marble generally of India is allowed to be metamorphic strata, this limestone exists in the Girnar rock of Kattywar; the lithographic form in Cutch, and between Neemuch and

Chittore; the white marble about Oodeypoor, and northwards in the neighbourhood of Nusseerabad, Jeypoor, Bessona, and Alwar; a narrow strip about 150 m. long in Bundelcund; again about Bidjyghur and Rhotasghur on the Sone; white marble in the bed of the Nerbudda, near Jubbulpoor; in the hills north-east of Nagpoor; near the junction of the Godavery and Prenheta rivers; thence along the Godavery more or less to Rajahmundry; Sholapoor district; on the Bheema; of every variety of colour, and greatly disturbed and broken up about Kaludgee, in the southern Mahratta country; along the Kistnah, from Kurnool to Amarawattee; and more or less over the triangular area formed by the latter place, Gooty, and the Tripetty hills. Chunam, an argillaceous limestone, used for building in Bengal, Bahar, Benares, &c.\* occurs in nodules in the alluvium, which, at Calcutta, is 500 to 600 feet thick. Near Benares, it contains fragments of freshwater shells. South of Madras, a dark clay abounds in marine shells, used in preference for lime-burning to those on the beach, as being freer from salt.

*Sandstone.*—appears to be composed of very fine grains of quartz, and more or less mica, united together by an argillaceous material. It exists in Cutch; in the Panna range, Bundelcund; the Kymore hills; Ceded Districts; in lat 18°, 15 m. west of the Godavery; on the banks of the Kistnah; plains of the Carnatic, and the districts watered by the Pennar river. It is present in the sub-Himalaya range, and in the Rajmahal hills. All the towns on the Jumna, from Delhi to Allahabad, appear to be built of this sandstone. The plains of Beekaneer, Joudpore, and Jessulmere, are covered with the loose sand of this formation. It borders on the northern and western sides of the great trappean tract of Malwa, and forms the north-eastern boundary of the Western India volcanic district.

Its thickness varies, either from original inequality, or subsequent denudation. Its greatest depth, at present known, is in the eastern part of the Kymore range, where it is 700 feet at Bidjyghur; and 1,300 feet at Rhotasghur; at the scarps of the waterfalls over the Panna range, it does not exceed 360 or 400 feet; from 300 to 400 feet is its thickness near Ryelcherroo and Sundrogam, in the Ceded Districts. Its greatest height above the sea is on the banks of the Kistnah, 3,000 feet. Organic remains are very abundant in this formation. It has been ascertained that the great trap deposit of the Western Ghauts, rests on a sandstone containing vegetable remains, chiefly ferns.

**VOLCANIC ROCKS.**†—*Trap.*—The largest tract is on the western side of India, and extends continuously from the basin of the Malpurba to Neemuch in Malwa; and from Balsar, about 20 m. south of the mouth of the Taptee, to Nagpoor. This is probably the most remarkable trap-formation existing on

\* The British Residency at Hydrabad (Deccan) is a specimen; the Corinthian columns, &c., being executed in white chunam.

† Volcanic fires are said by the natives to exist among the loftier peaks of the Hindoo-Koosh and the Himalayan ranges, but earthquakes are of rare occurrence. A severe one was, however, experienced throughout a large extent of country on 26th August, 1833,—vibration from N.E. to S.W., with three principal shocks: first at 6:30 P.M.; second, 11:30 P.M.; and third, at five minutes to midnight. It was most severely felt at and near Katmandoo, where about 320 persons perished: the trembling of the earth commenced gradually, and then travelled with the rapidity of lightning towards the westward; it increased

in violence until the houses seemed shaken from their foundations,—large-sized trees bent in all directions; the earth heaved fearfully; and while the air was perfectly calm, an awful noise burst forth as if from an hundred cannon. Probably in India, as in Australia, subterranean igneous action, which was formerly very violent, is now almost quiescent, or finds its vent through mighty chimneys at a height of four or five miles above the sea. The Lunar Lake, 40 m. from Saalna, is a vast crater 500 ft. deep, and nearly 5 m. round the margin; its waters are green and bitter, supersaturated with alkaline carbonate, and containing silix and some iron in solution: the mud is black, and abounds with sulphuretted hydrogen; the water is, nevertheless, pure and void of smell.

the surface of the globe; its breadth is about 335 m. N. to S.; length, about 350 m. E. to W.; and covers an area of from 200,000 to 250,000 sq. m.\* Another portion extends from Jubbulpoor to Amarkantak, thence south-westerly towards Nagpoor. It constitutes the core of the Western Ghats, and predominates in the Mahadeo and Sautpoora mountains.

Its two grand geological features along the Ghauts, where it has attained the highest elevation, are flat summits and regular stratification. Fourteen beds have been numbered in Malwa, the lowest and largest of which is 300 feet thick. These are equally numerous, if not more so, along the Ghauts, but the scarps are of much greater magnitude. Besides its stratification, it is in many places columnar; as in the beds of the Nerbudda and Chumbul; and the hill-fort of Singhur presents a surface of pentagonal divisions.

Wherever the effusions exist to any great extent, they appear to be composed of *laterite* above, then *basalt*, and afterwards *trappite* and *amygdaloid*.

*Basalt*.—There are two kinds of this rock; a dark blue-black, and a brown-black. Both are semi-crystalline. Their structure is massive, stratified, columnar, or prismatic. Dark blue is the basalt of Bombay Island, brown-black that of the Deccan.

To this general description, I may add what I have been enabled to glean of the specific structure of some of the principal positions:—

*Himalayas*.—Formations primary: the first strata, which is towards the plain, consists of limestone, lying on clay-slate, and crowned by slate, grey-wacke, or sandstone. Beyond the limestone tract, gneiss, clay-slate, and other schistose rocks occur; granite arises in the mountains near the snowy ranges. The peaks are generally composed of schistose rocks, but veined by granite to a great elevation. Kamet, however, is an exception, appearing to consist of granite alone. Greenstone dykes rise through and intersect the regular rocks. Strata fractured in all directions; slate, as if crushed, and the limestone broken into masses. The soil is principally accumulated on the northern side.

The formation of the Indo-Gangetic chain, in Koonawur, is mostly gneiss and mica-slate; in some places, pure mica. On the left bank of the Sutlej, granite prevails, forming the Raldang peaks. Further north, it becomes largely intermixed with mica-slate; to the north-east changes into secondary limestone, and schistose rocks, abounding in marine exuvia.† In Kumaon, the Himalayas are composed of crystalline gneiss, veined by granite; the range forming the north-eastern boundary, is believed to be of recent formation. The mountainous tract south of the principal chain in Nepaul consists of limestone,

\* The rock in which the Ellora caves are excavated is said to be a basaltic trap, which, from its green tinge and its different stages from hardness to disintegration, is supposed by the natives to be full of vegetable matter, in a greater or less advance to putrefaction: the crumbling rock affords a natural green colour, which is ground up and employed in painting on wet chunam (lime plaster.)

† Dr. Gerard found some extensive tracts of shell formation 15,000 ft. above the sea. The principal shells comprised cockles, mussels, and pearl-fish; nummulites and long cylindrical productions. These shells, of which many were converted into carb. of lime, some crystallised like marble, were lying upon the high land in a bed of granite, and pulverised state: the adjacent rocks com-

posed of hornstone, and conglomerate. The Sewalik (the most southerly and lowest range of the Himalayan system) is of alluvial formation, consisting of beds of clay, sandstone with mica, conglomerate cemented by calcareous matter, gravel, and rolled stones of various rocks. The supposition is, that it is the *debris* of the Himalaya, subsequently upheaved by an earthquake. The geology of the Sewalik is characterised by the occurrence of quantities of fossil remains.

*Punjab*.—Near the north-east frontier, in the vicinity of the Himalaya, is an extensive tract of rocks and deposits of recent formation; limestone, sandstone, gypsum, argillaceous slate; occasionally veins of quartz.

*The Salt-range*.—Grey-wacke, limestone, sandstone, and red tenaceous clay, with deposits of chloride of sodium, or common salt.

*The Syfed-Koh* is primary, consisting of granite, quartz, mica, gneiss, slate, and primary limestone.

*The Suliman* mountains are of recent formations, principally sandstone and secondary limestone, abounding in marine exuvia.

*Central India*.—Arravulli range, generally primitive, consisting of granite, quartz, and gneiss. Formation along banks of upper course of Nerbudda, trapean; lower down, at Jubbulpoor, granitic; at Bhera Ghur, channel contracted between white cliffs of magnesian limestone; at the junction of the Towah, there is a ledge of black limestone: at, and near Kal Bhyru, slate of various sorts; basaltic rocks scattered over channel. Ranges enclosing Nemauro, banks of rivers, and eminences in the valley, basaltic. Saugor and Nerbudda territory; eastern part, towards Amarkantak, generally sandstone; from here it extends westward, forming the table-land bounding Nerbudda valley on the north, and is intermixed with marl, slate, and limestone. The volcanic tract commences about lon. 79°, and extends to about the town of Saugor, which is situate on its highest part. This (trap), with that of sandstone, further east, may be considered to belong to the Vindhya; and the former to the Mahadeo and Sautpoora ranges. In some places, primitive rocks appear through the overlying bed. The Bindvachal hills are of horizontally-stratified sandstone; Panna hills, sandstone, intermixed with schiste and quartz; and, to the west, overlaid by limestone.

*Western Ghauts*.—The great core is of primary formation, inclosed by alternating strata of more recent origin. These have been broken up by prodigious outbursts of volcanic rocks; and from Mahabulishwar northward, the overlying rock is exclusively of the trap formation; behind Malabar they are of primitive trap, in many places overlaid by immense masses of laterite, or iron-clay. The Vurragherry or Pulnai hills (Madura) are gneiss, stratified with quartz; in some places precipices of granite.

*Nagpoor*.—North-western and western part, composed of shell limestone, the large blocks composed of a multitude of shells of different sizes, imbedded in a mass of calcareous tufa. Four classes of shell formation were distinguished; one in particular, a freshwater bivalve, resembling the *unio*, which exists in great abundance at the foot of the lower hills and throughout the Doob. In the Neermal hills, N. of the Godavery, on the road from Hyderabad to Nagpoor, many very perfect fossil shells, mostly bivalves, and evidently marine, have been discovered imbedded in a volcanic rock, together with the head and vertebrae of a fish: the formations around rest everywhere on granite; and there are several hot-springs holding lime in solution. Univalves and bivalves, particularly *buccinum*, *ammonites*, and mussels, abound in Malwa.

canic, principally basalt and trap. This terminates at the city of Nagpoor, and the primitive, mostly granite and gneiss, rises to the surface.

*Mysoor*.—The *droogs*, huge isolated rocks, scattered over the surface; vary in elevation from 1,000 to 1,500 feet; bases seldom exceeding 2 m. in circumference; generally composed of granite, gneiss, quartz, and hornblende; in many places overlaid by laterite.

**SOIL**.—mainly determined by the geological character of each district, except in the deltas, or on the banks of rivers, as in the Punjab, where an alluvium is accumulated. The land in Lower Bengal is of inexhaustible fertility, owing partly to the various salts and earthy limestone with which the deposits from the numerous rivers are continually impregnated: it is generally of a light sandy appearance. The alluvium of Scinde is a stiff clay; also that of Tanjore, Sumbulpore, and Cuttack, by the disintegration of granitic rocks. A nitrous (saltpetre) soil is general in Bahar; in the vicinity of Mirzapoor town, it is strongly impregnated with saline particles; and at many places in Vizagapatam. The *regur*, or cotton ground, which extends over a large part of Central India, and of the Deccan, is supposed to be formed by a disintegration of trap rocks; it slowly absorbs,\* and long retains moisture; and it has produced, in yearly succession, for centuries, the most exhausting crops. It spreads over the tablelands of the Ceded Districts and Mysoor, flanks the Neilgherry and Salem hills, and pervades the Deccan, but has not been observed in the Conkans. It is a fine, black, argillaceous mould, containing, in its lower parts, nodules, and pebbly alluvium. *Kunkur* (a calcareous conglomerate)† fills up the cavities and fissures of the beds beneath it; and angular fragments of the neighbouring rocks are scattered over its surface. It contains no fossils. In some parts it is from 20 to 40 feet thick. *Kunkur* is common in the north-western provinces, the rocks often advancing into the channel of the Jumna, and ob-

structing the navigation. In the western part of Muttra district, it is mixed with sand: in Oude, some patches of this rock, which undergo abrasion very slowly, stand 70 or 80 feet above the neighbouring country, which, consisting of softer materials, has been washed away by the agency of water. Its depth, in the eastern part of Meerut district, is from one to 20 feet. In the Doab, between the Ganges and Jumna, and in many parts of the N.W. provinces, there is a light rich loam, which produces excellent wheat; at Ghazee-pore, a light clay, with more or less sand, is favourable for sugar and for roses. As the Ganges is ascended before reaching Ghazee-pore, the soil becomes more granitic, and is then succeeded by a gravel of burnt clay, argite, and cinders, resembling what is seen in basaltic countries. Assam, which has been found so well adapted for the culture of tea, has for the most part a black loam reposing on a gray, sandy clay; in some places the surface is of a light yellow clayey texture. The soil usually found in the vicinity of basaltic mountains is of a black colour, mixed with sand. Disintegrated granite, where felspar predominates, yields much clay.

A sandy soil exists in the centres of the *Doobas*, of the Punjab; more or less in Paniput, Rhotuck, and Hurriana districts: Jeypoor, Machery, and Rajpootana; and in some parts of Scinde; in Mysoor, a brown and rather sandy earth prevails; Trichinopoly is arid and sandy; and near Tavoy town, on the E. side of the Bay of Bengal, there is a large plain, covered with sand.

The soil of Nagpoor, in some tracts, is a black, heavy loam, loaded with vegetable matter; red loam is found in Salem and in Mergui.

Tinnevelly has been found well suited for the cotton plant, and the substance in which it delights looks like a mixture of lime, rubbish, and yellowish brickdust, intermixed with nodules of *Kunkur*.‡ A chymical analysis of three of the best cotton soils in these districts, gives the following result:—

Cotton Soils.	Vegetable matter.	Saline and Extractive.	Iron.			Carb. lime.	Magnesia.	Alumina.	Silex.	Water and loss.	Remarks.
			Prottox.	Deutox.	Tritox.						
Bundelcund	2.00	0.33	—	7.75	—	11.90	trace	3.10	74.0	1.00	{ No peat or lignite; nothing soluble in cold water; silex in fine powder; kunkur in the gravel. { Gravel, mostly silex, with some felspar, but no kunkur. { Gravel, almost wholly kunkur; some carb. iron; half the soil of gravel.
Coimbatore	2.30	traces	4.00	—	—	7.50	trace	2.80	82.80	0.60	
Tinnevelly	0.15	0.20	—	—	2.88	19.50	0.15	2.00	74.00	1.12	

Guzerat is generally termed the Garden of Western India. With the exception of Kattywar, and to the eastward of Broach, it is one extensive plain, comprising many different soils; the chief varieties being

\* All the soils of India have, in general, a powerful absorbing quality; hence their fertile properties.

† *Kunkur*.—A calcareous concretion, stratified and in mammillated masses of all sizes, which contains 50 to 80 per cent. of carbonate of lime, some magnesia, iron, and alumina: these nodules are interspersed in large quantities throughout extensive tracts of the alluvial and secondary formations, and are ascribed to the action of calcareous springs, which are of frequent occurrence.

‡ It is curious to note, in different countries, how plants

the black or cotton soil, and the *gorat*, or light grain-producing soil.¶ The former is chiefly confined to Broach and part of Surat N. of the Taptee; the latter prevails throughout Baroda, Kaira, and part

seem to vary in their feeding: thus, at Singapore, the best cotton soil *apparently* consists of large coarse grains of white sand, mixed with something like rough charcoal-dust, and with fragments of vegetables and mosses of all sorts. A somewhat similar substance, mingled with shells and decayed vegetable matter, is the favourite *habitat* of the Sea Island cotton of Georgia, U. S.

§ See an interesting *Essay on the Agriculture of Hindoostan*, by G. W. Johnston.

¶ See Mackay's valuable *Report on Western India*, p. 41.

of Ahmedabad, becoming more mixed with sand to the northward; black soil abounds to the westward of the Gulf, and in many of the Kattywar valleys. The numerous vegetable products of India attest the variety of soils which exist there.

**MINERALS.**—Various metals have been produced and wrought in India from the earliest ages: the geological character of the different districts indicates their presence. So far as we have yet ascertained, their distribution is as follows:—

**Iron.**—Ladakh.—Mines in the north-eastern part of the Punjab,\* and in almost every part of Kumaon, where the requisite smelting processes are performed; though on a small scale, and in a rude and inefficient manner. Mairwarra, in veins, and of good quality, believed to be inexhaustible. Rajmahal; in gneiss. Lalgang, 16 miles south-west of Mirzapoor city. Kupputgode hills; in schistes, quartz, and gneiss: on the north-east side, one stratum of iron, 60 feet thick. Ramghur—hills abounding in iron, though not of the best quality. Hazareebagh, in gneiss—flinty brown colour, pitchy lustre, and splintery fracture; 20 feet thick. Various parts of Palamow district; at Singra in inexhaustible quantities. Eastern part of Nagpoor territory. Mine of good quality at Tendukhera, near Jubbulpoor (were the navigation of the Nerbudda available, this would prove a most useful article of export for railways.) Western extremity of Vindhya; in gneiss. Southern Mahratta country; in quartz: micaceous and magnetic iron-ore occur in the same district; in clay-slate. In all the mountains of the Western Ghats; in Malabar; in veins, beds, or masses, in the laterite (here extensively smelted.) Salem, southern part (yields 60 per cent. of the metal fit for castings.) Nellore district. In many places in Masulipatam. Rajahmundry; in sandstone hills. Vizagapatam. Abundant in many parts of Orissa. Tenasserim provinces; occurs in beds, veins, and in rocks. Between the Saluen and Gyne rivers, it is found in sandstone hills. Most abundant between Ye and Tavoy, approximating the sea-coast; the best is at a short distance north of Tavoy town: it is therein two forms—common magnetic iron-ore; and massive, in granular concretions, crystallized, splendid, metallic, highly magnetic, and with polarity. The ore would furnish from 74 to 80 per cent. raw iron. In various places the process of smelting is rudely performed by the natives, but they produce a metal which will bear comparison with the best Swedish or British iron.†

**Tin.**—Oodeypoor,—mines productive. On the

\* Colonel Steinbach says that the mineral wealth of the Punjab is considerable; that mines of gold, copper, iron, plumbago, and lead abound, and that "properly worked they would yield an enormous revenue."

† The natives of Cutch make steel chain-armour, sabres, and various sharp edge tools from their iron; the horse-shoes are excellent—the metal being more malleable, and not so likely to break as the English iron.

‡ The gray ore found in Dohnpur affords 30 to 50 per cent. of copper; it is associated with malachite, and contained in a compact red-coloured dolomite: hence mining operations can be carried on without timbering or masonry.

§ Mines discovered by Dr. Heyne, near Wangapadu. "A footpath, paved with stones, led up the hill to the place which was shown me as one of the mines. It is situated two-thirds up the hill, and might be about 400 ft.

banks of the Barakur, near Palamow; in gneiss. Tenasserim provinces. Tavoy, rich in tin-ore; generally found at the foot of mountains, or in hills: Pakshan river; soil in which the grains are buried, yields 8 or 10 feet of metal; at Tavoy, 7 feet: of superior quality in the vicinity of Mergui town.

**Lead.**—Ladakh. Koonawur. Ajmere; in quartz rocks. Mairwarra. Eastern part of Nagpoor. In the vicinity of Hazareebagh. Eastern Ghats at Jungamanipenta; in clay-slate—mines here. Amherst province. Fine granular galena obtained in clay-slate, and clay limestone on the Touser, near the Dehra-Doon.

**Copper.**—Ladakh. Koonawur, in the valley of the Pabur. Kumaon, near Pokree; but these mines are almost inaccessible, and the vicinity affords no adequate supply of fuel for smelting: others at Dohnpur,‡ Dhobri, Gangoli, Sira, Khori, and Shor Gurang. Mairwarra. Oodeypoor; abundant,—it supplies the currency. Southern Mahratta country, in quartz; also in a talcose form. Vencatigherry, North Arcot. Nellore district.§ Sullivan's and Callagkiank Islands, in the Mergui Archipelago. This metal is most probably extensively distributed, and of a rich quality.

**Silver.**—In the tin mines of Oodeypoor. In the lead mine, near Hazareebagh, and other places.

**Gold.**—Sands of Shy-yok, Tibet. Ditto Chenab, Huroo, and Swan rivers, Punjab. Ditto Aluknunda, Kumaon. Throughout the tract of country W. of the Neilgherries, amid the rivers and watercourses, draining 2,000 sq. m., this coveted metal abounds; even the river stones, when pounded, yield a rich product: it is usually obtained in small nuggets. In the iron sand of the streams running from the Kupputgode hills, and from the adjoining Saltoor range. Sumbulpoor; in the detrius of rocks. In moderate quantities in several places in the eastern part of Nagpoor. Many of the streams descending from the Ghauts into Malabar; and in Wynaad. Gold-dust in Mysoor.|| In the Assam rivers it is plentiful: near Gowhaty 1,000 men used to be employed in collecting ore for the state. Various parts of Tenasserim provinces, but in small quantities. The geological structure of India indicates an abundance of the precious metals.

**Coal.**—The carboniferous deposits of the *oolitic series* in Bengal, west of the Ganges and Hooghly, consist of coal, shale, and sandstone, but no limestone, and they appear chiefly to occupy the depressions of the granitic and metamorphic rocks which form this part of India, becoming exposed in the banks or beds of watercourses or rivers which have passed through them, or in escarpments which have

above the village (Wangapadu.) An open gallery cut into the rock, demonstrated that it had been formerly worked; and as the stones, which lay in abundance near it, were all tinged or overlaid with mountain green, there could be no doubt that the ore extracted had been copper."—(Heyne, *Tracts on India*, p. 112.)

|| In excavating the disintegrating granite in the vicinity of Bangalore, to ascertain the extent to which the decomposing influence of the atmosphere will affect the solid rock (viz., 30 to 35 ft.), the contents of soil were frequently auriferous. In blasting sienite at Chinapatam, 40 m. from Bangalore, on the road to Seringapatam, Lieutenant Baird Smith, B.E., observed considerable quantities of gold disseminated in small particles over the fractured surfaces. At Wynaad this metal was obtained from rich yellow earth in sufficient quantity to employ a number of labourers and to yield some return.

been produced by upheaval of the rocks on which they were deposited. The coal occurs in strata from an inch or less to 9 or 10 feet thickness, interstratified with shale and sandstone; the whole possessing a dark black or blue colour, of a greater or less intensity. At Burdwan its character is slaty: the genera of plants are partly English, some Australian, some peculiar. The depth at the Curhurbalee field, situated 60 miles south of the Ganges, near Surajgurrah, is from 50 to 100 feet. Proceeding westerly, towards Palamow district, which contains many valuable and extensive fields, and where several shafts have been sunk, it has been seen about 16 m. from Chergerh, in Singrowla; at the confluence of the Sone and Tipan, about 30 m. E. from Sohajpoor. Near Jeria, in Pachete district. Hills in Ramghur, abounding in coal. Jubbulpoor, 30 m. S. from Hoosungabad; in Shahpoor in the same neighbourhood; and abundantly along the valley of the Nerbudda. Traces of it are said to exist in the diamond sandstone north-west of Nagpoor, and it has been found in the Mahadeo mountains. In the Punjab, at Mukkad, on the left bank of the Indus, and in the localities of Joa, Meealee, and Nummul. The extremes of this coal formation, so far as have yet been discovered in India, are:—the confluence of the Godavery and Prenheta in the south, in lat. 19°, and the Salt range in about 33° N.; Cutch in the west, and Burdwan in the east; and detached in Silhet, Pegu (recently found of excellent quality), and the Tenasserim provinces (plentiful, and possessing good properties.) There are many other places, no doubt, in the country between Bengal and Berar, where this valuable mineral exists; traces of it have been observed in Orissa, but it has not yet been found available for use; it is not improbable that it extends across the delta of the Ganges to Silhet, distant 300 miles. It also occurs extensively in the grits bounding the southern slope of the Himalaya: it has been questioned whether this is the older coal, or only lignite associated with nagel-flue,—where the Teesta issues from the plain, its strata is highly inclined, and it bears all the other characters of the older formation. Analysis of Indian coal found in different parts, and near the surface, gave the following results:—Chirra Poonjee, slaty kind: specific gravity, 1.497; containing volatile matter, 36; carbon, 41; and a copious white ash, 23 = 100. Nerbudda (near Fatehpoor), near the surface,—volatile matter, 10.5; water, 3.5; charcoal, 20; earthy residue (red), 64 = 100. Cossyah hills: specific gravity, 1.275; volatile matter or gas, 38.5; carbon or coke, 60.7; earthy impurities, 0.8 = 100 —(ash very small.) Hurdwar: specific gravity, 1.968; volatile matter, 35.4; carbon, 50; ferruginous ash, 14.6 = 100. Arracan: specific gravity, 1.308; volatile matter, 66.4; carbon, 33; ash, 0.6 = 100. Cutch: charcoal, 70; bitumen, 20; sulphur, 5; iron, 3; calcareous earths, 2.

\* These mountains are bounded on all sides by granite, that everywhere appears to pass under it, and to form its basis: some detached portions have only the upper third of their summits of sandstone and quartz, the basis or remaining two-thirds being of granite. Deep ravines are not infrequent. The diamond is procured only in the sandstone breccia, which is found under a compact rock, composed of a beautiful mixture of red and yellow jasper, quartz, chalcedony, and hornstone, of various colours, cemented together by a quartz paste: it passes into a pudding-stone of rounded pebbles of quartz, hornstone, &c., cemented by an argillo-calcareous earth of a loose friable texture, in which the diamonds are most frequently found.

*Sulphur*.—Mouths of Godavery, and at Condapilly, on the Kistnah. Sulphate of alumina obtained from the aluminous rocks of Nepal; used by the natives to cure fresh wounds or bruises: yields on analysis—sulphate of alumina, 95; peroxyde of iron, 3; silicic acid, 1; loss, 1. Sulphate of iron is procured in the Behar hills, and used by the Patna dyers: it yields sulphate of iron, 39; peroxyde of iron, 36; magnesia, 23; loss, 2 = 100.

*Diamonds*.—Sumbulpoor has been celebrated for the finest diamonds in the world; they are found in the bed of the Mahanuddy. Mines were formerly worked at Wyragher, Nagpoor; Malavilly, in Masulipatam (near Ellore); and at Panna, in Bundelcund. Mr. H. W. Voysey described, in 1824, the diamond mines of the *Nulla Nulla* mountains, north of the Kistnah,\* which were formerly extensively worked.†

*Rubies*.—Sumbulpoor; in the detrius of rocks.

*Pearls*.—Gulf of Manaar, near Cape Comorin, and on the coast of many of the islands in the Mergui Archipelago.

Muriat of soda (common salt) is found in rock and liquid form at various places. A salt lake, 20 m. long by 1½ broad, is situated in lat. 26° 53', long. 74° 57'; it supplies a great portion of the neighbouring country with salt after the drains are dried up. A salt lake in Berar contains in 100 parts,—muriat of soda, 20; muriat of lime, 10; muriat of magnesia, 6. Towards the sources of the Indus, salt lakes exist at 16,000 ft. above the sea. There are extensive salt mines in the *Salt range* of the Punjab. Natron and soda lakes are said to exist in the Himalaya.

Cornelian is found and worked in different places: the principal mines are situated at the foot of the western extremity of the Rajpepla hills, close to the town of Ruttunpoor; the soil in which the cornelians are imbedded consists chiefly of quartz sand—reddened by iron, and a little clay. Agates abound in Western India: at one part of Cutch the sides of the hills (of amygdaloid) are covered with heaps of rock crystal, as if cart loads had been purposely thrown there, and in many parts of the great trappean district the surface is strewn with a profusion of agatoid flints, onyx, hollow spheroids of quartz, crystals, and zoolitic minerals. There are evidences of several extinct volcanoes in Cutch.

This is but an imperfect sketch of the minerals of India: doubtless, there are many more places where metals exist; but during the anarchy and warfare which prevailed prior to British supremacy, the very knowledge of their locality has been lost. At no distant day this subterranean wealth will be developed; and probably, when the gold-fields of Australia are exhausted, those of India may be profitably worked.

The breccia is seen at depths varying from 5 to 50 feet, and is about 2 feet in thickness; immediately *above* it lies a stratum of pudding-stone, composed of quartz and hornstone pebbles, cemented by calcareous clay and grains of sand. The miners are of opinion that the diamond is always growing, and that the chips and small pieces rejected ultimately increase to large diamonds.—*Trans. A. S. Bengal*, vol. xiv., p. 120.

† The diamonds of Golconda have obtained great celebrity throughout the world, but they were merely cut and polished there, having been generally found at Partell, in a detached portion of the Nizam's dominions, near the southern frontier, in lat. 16° 40', long. 80° 28'.

### CHAPTER III.

POPULATION—NUMBERS—DISTRIBUTION—DENSITY TO AREA—PROPORTION OF HINDOOS TO MOHAMMEDANS—VARIETIES OF RACE—DIVERSE LANGUAGES—ABORIGINES—SLAVERY—PAST AND PRESENT CONDITION OF THE PEOPLE.

From remote antiquity India has been densely peopled; but, as previously observed (p. 13), we know nothing certain of its indigenous inhabitants,—of accessions derived from immigration, or from successful invasions by sea and land,—of the progressive natural increase,—or of the circumstances which influence, through many generations, the ebb and flow of the tide of population.\* There is direct testimony, however, that before the Christian era the country was thickly inhabited by a civilised people, dwelling in a well-cultivated territory, divided into numerous flourishing states, with independent governments, united in federal alliance, and capable of bringing into the field armies of several hundred thousand men.

For more than a thousand years after the Greek invasion, we have no knowledge of what was taking place among the population of India, and but a scanty notice, in the eighth century, of the Arab incursions of the regions bordering on the Indus. Even the marauding forays of Mahmood the Ghaznevide, in the eleventh century, afford no internal evidence of the state of the people, save that derived from a record of their magnificent cities, stately edifices, immense temples, lucrative trade, and vast accumulations of wealth; the Hindoos were probably then in a more advanced state of social life, though less warlike than during

\* It is not improbable that some of the early immigrants were offshoots of the colonists who are said to have passed from Greece into Egypt, thence travelled eastward, forming settlements on the banks of the Euphrates and Tigris; and ultimately reached the Indus and Ganges. In craniological and facial characteristics, many Hindoos present a striking similitude to the ancient Greek, modified by climate, food, and habits; and in several architectural structures, of which ruins are still extant, there is considerable resemblance to the ancient buildings of Egypt, and those erected on the Babylonian plains. Bryant is of opinion that Chaldea was the parent country of the Hindoos; Vans Kennedy traces the Sanscrit language to Mesopotamia; H. H. Wilson deems that the Hindoos connected with the *Rig Veda* were from a northern site, as in that work the worshipper on more than one occasion, when soliciting long life, asks for an hundred winters, which the Professor thinks would not have been desired by the natives of a warm climate. This is not conclusive.

the Alexandrine period: they had gradually occupied the whole of India with a greatly augmented population, and possessed a general knowledge of the arts, conveniences, and luxuries of life.

During the desolating period of Moslem forays, and of Mogul rule, there appears to have been a continued diminution of men and of wealth, which Akber in vain essayed to check by some equitable laws. We have sufficient indirect and collateral evidence to show that whole districts were depopulated, that famines frequently occurred, and that exaction, oppression, and misgovernment produced their wonted results in the deterioration of the country. No census, or any trustworthy attempt at ascertaining the numbers of their subjects, was made by the more enlightened Mogul sovereigns, even when all their energies were directed to the acquisition of new dominions.

The English, until the last few years, have been as remiss in this respect as their predecessors in power. An idea prevailed that a census would be viewed suspiciously as the prelude to a capitation tax, or some other exaction or interference with domestic affairs. In Bengal, Bahar, and Orissa, which we have had under control for nearly a century, no nearer approximation has yet been made to ascertain the number of our subjects, than the clumsy and inaccurate contrivance of roughly ascer-

In Britain man frequently dates his age from the number of summers he has seen. There can, however, be little doubt that many of the early invaders of India were of the type of Japhet,—some of them acquainted with maritime commerce, and all comparatively more civilised than the *indigenes* who were driven towards the southward and eastward, and to mountain and jungle fastnesses. When this occurred it is impossible to determine. General Briggs says that the *Vedas* were written in India at the period when Joshua led the Israelites over Jordan into Canaan. The date when Menu, the lawgiver, lived has not been ascertained. Whatever the period, the Hindoos had not then occupied the country farther south than the 23rd degree, as Menu describes the people beyond as "barbarians, living in forests, and speaking an unknown language." Remote annals are lost in legends and traditions; and the chronology of Hindooism is an absurdity, except on the principle of cutting off the ciphers attached to the apocryphal figures.



taining the houses and huts in a village or district, and then supposing a fixed number of mouths in each house (say five or six.) The fallacy of such estimates is now admitted, and rulers are beginning to see the value of a correct and full census, taken at stated intervals, in order to show the rates of increase or decrease, and to note the causes thereof. I believe that the Anglo-Indian government have no reason to apprehend displeasing disclosures if a decennial census be adopted for all the territories under their sway: the natural fecundity of the Hindoos would lead to an augmentation where peace and the elements of animal sustenance exist; and a satisfactory proof would be afforded of the beneficence of our administration, by the multiplication of human life. With these prefatory remarks, I proceed to show briefly all that is at present known on the subject.

At pp. 3 to 11 of this volume will be found the returns collected by the indefatigable Edward Thornton, head of the statistical department of the East India House, with remarks thereon at p. 2. Evidently there must be erroneous estimates somewhere, otherwise there would not be so great a disproportion of mouths to each square mile, as appears between the British territories (157) and the other states (74)—

\* There have been several censuses of China, of which we have little reason to doubt the accuracy: that of 1753, showed 102,328,258; that of 1792, 307,467,200; that of 1812, 361,221,900. In some districts, along river banks, the density is very great; such as Kangsoo (Nankin)—774 to the sq. m.: in

say 105,000,000 on 666,000 sq. m., and 53,000,000 on 717,000 sq. m. Estimating the entire area, as above, at 1,380,000 sq. m., and the population thereon at 158,000,000, would give 114 to each sq. m. Viewing India as including the entire region, from the Suliman on the west, to the Youmadoung mountains on the east, and from Cape Comorin to Peshawur, and estimating the area at 1,500,000 sq. m., and the number of inhabitants to each sq. m. at 130, would show a population of 195,000,000; which is probably not far from the truth.

The Chinese census shows 367,632,907 mouths on an area of 1,297,999 sq. m., or 283 to each sq. m.\* In England the density is 333; Wales, 134; Ireland, 200; Scotland, 100.† India, with its fertile soil, a climate adapted to its inhabitants, and with an industrious and comparatively civilised people, might well sustain 250 mouths to each sq. m., or 375,000,000 on 1,500,000 sq. m. of area.‡

The following table, framed from various public returns and estimates, is the nearest approximation to accuracy of the population of each district under complete British rule; it shows (excluding Pegu) a total of about 120,000,000 (119,630,098) persons on an area of 829,084 sq. m., or 146 to each sq. m.:—

others the density varies from 515 down to 51. (*See* vol. i., p. 29, of my report on China to her Majesty's government, in 1847.)

† *See* Preface (p. xv.) to my Australian volume, new issue, in 1855, for density of population in different European states.

‡ In illustration of this remark, the following statement, derived from the Commissioners' Report on the Punjab,—of the population of Jullundhur Zillah, situated between the rivers Sutlej and Beas,—is subjoined, with the note appended by the census officer, Mr. R. Temple, 25th of October, 1851:—

Pergunnahs.	Hindoo.		Mussulmen.		Total.		Grand Total.	Total Area in Acres.	Area in sq. miles of 640 Acres each.	Number of inhabitants per sq. mile.	Number of Acres to each Person.
	Agricultural.	Non-Agricultural.	Agricultural.	Non-Agricultural.	Agricultural.	Non-Agricultural.					
Philor . . .	41,997	38,591	20,442	19,211	62,439	57,802	120,241	187,001	299	412	1.52
Jullundhur . .	48,967	49,652	46,049	50,568	95,016	100,220	195,236	250,397	391	499	1.25
Rahoon . . .	42,739	47,201	25,145	19,027	67,884	66,228	134,112	199,472	312	430	1.48
Nakodur . . .	28,787	19,349	44,085	26,181	72,872	45,530	118,402	225,031	351	337	1.80
Total . . .	162,490	154,793	135,721	114,987	298,211	269,780	567,991	861,901	1,346	422	1.55

*Note.*—This return certainly shows a considerable density of population. It may of course be expected that a small and fertile tract like this, which contains no forest, waste, or hill, should be more thickly peopled than an extensive region like the North-Western Provinces, which embraces every variety of plain and mountain, of cultivation and jungle; we find therefore that in the provinces we have 322 inhabitants per square mile, while here we have one-fourth more, or 422; the population of this district proportionately exceeds that of twenty-two out of thirty-one districts of the North-Western Provinces, and is less than that of nine. It also exceeds the average population of any one out of the six divisions. It about equals that of the districts of Agra, Muttra, Furruckabad, and Cawnpur, but is inferior in density to the populous vicinities of Delhi or Benares, and to the fertile districts of Juanpooor, Azeemgurh, and Ghazeepooor. The comparative excess of Indian over European population has become so notorious, that it is superfluous to comment on the fact, that the population averages of this district exceed those of the most highly peopled countries of Europe.

## POPULATION BY PROVINCES AND DISTRICTS.

*British Territories in Continental India—Area, Chief Towns, and Position.*

Provinces, Districts, &c.	Area in Square Miles.	Population.	Principal Town.	Position of Town.		Date of Acquisition.
				Lat. N.	Long. E.	
<b>BENGAL PROVINCE:—</b>						
Calcutta, and 24 Pergunnas . . . . .	1,186	701,182	Calcutta . . . . .	22 34	88 26	1700 & 1757
Hooghly . . . . .	2,089	1,520,840	Hooghly . . . . .	22 55	88 23	1757 & 1765
Nuddea . . . . .	2,942	298,736	Kishnugur . . . . .	23 24	88 28	1765
Jessore . . . . .	3,512	381,744	Jessore . . . . .	23 9	89 11	"
Backergunge and Shabazpore . . . . .	3,794	733,800	Burrisol . . . . .	22 33	90 22	"
Dacca . . . . .	1,960	600,000	Dacca . . . . .	23 43	90 25	"
Tipperah and Bulloah . . . . .	4,850	1,406,950	Tipperah . . . . .	23 28	91 10	"
Chittagong . . . . .	2,560	1,000,000	Chittagong . . . . .	22 20	91 55	"
Sylhet and Jyntea . . . . .	8,424	380,000	Sylhet . . . . .	24 54	91 50	1835
Mymensing . . . . .	4,712	1,487,000	Sowara . . . . .	24 44	90 23	1765
Rajeshaye . . . . .	2,084	671,000	Rampoor . . . . .	24 33	88 38	"
Moorsheadabad . . . . .	1,856	1,045,000	Berhampore . . . . .	24 12	88 18	"
Beebhoom . . . . .	4,730	1,040,876	Sooree . . . . .	23 53	87 31	"
Dinagepore . . . . .	3,820	1,200,000	Dinagepore . . . . .	25 34	88 38	"
Rungpore . . . . .	4,130	2,559,000	Rungpore . . . . .	25 40	89 16	"
Burdwan . . . . .	2,224	1,854,152	Burdwan . . . . .	23 12	87 56	1760
Baraset . . . . .	1,424	522,000	Baraset . . . . .	22 43	88 33	"
Bancoorah . . . . .	1,476	480,000	Bancoorah . . . . .	23 14	87 6	1760
Bhagulpore . . . . .	5,806	2,000,000	Bhagulpore . . . . .	25 11	87 0	1765
Monghyr . . . . .	2,558	800,000	Monghyr . . . . .	25 19	86 30	"
Maldah . . . . .	1,000	431,000	Maldah . . . . .	25 2	88 11	"
Bagoorah . . . . .	2,160	900,000	Bagoorah . . . . .	24 50	89 25	"
Pubna . . . . .	2,606	600,000	Pubna . . . . .	24 0	89 12	"
Purneah . . . . .	5,878	1,600,000	Purneah . . . . .	25 46	87 34	"
Fureedpore, Deccan, and Jelalpore . . . . .	2,052	855,000	Fureedpore . . . . .	23 36	89 50	"
Darjeeling . . . . .	834	30,882	Darjeeling . . . . .	27 2	88 19	1835 & 1850
Singhbhoom . . . . .	2,944	200,000	Chaibassa . . . . .	22 36	85 44	1765
Maunbhoom . . . . .	5,652	772,340	Pachete . . . . .	23 36	86 50	"
<b>SOUTH WEST FRONTIER:—</b>						
Chota Nagpore . . . . .	5,308	482,900	Lohadugga . . . . .	23 6	84 46	1818
Palamow . . . . .	3,468		Palamow . . . . .	23 50	84 1	"
<b>BAHAR PROVINCE:—</b>						
Ramghur . . . . .	8,524	372,216	Ramghur . . . . .	24 0	85 24	1763
Bchar . . . . .	5,694	2,500,000	Gyah . . . . .	24 43	85 2	"
Patna . . . . .	1,828	1,200,000	Patna . . . . .	25 53	85 16	"
Shahabad . . . . .	3,721	1,600,000	Arrah . . . . .	25 31	84 43	1775
Tirhoot . . . . .	7,402	2,400,000	Mozufferpore . . . . .	26 6	85 28	1765
Sarun and Chumparun . . . . .	2,560	1,700,000	Sarun or Chupra . . . . .	25 45	85 48	"
Sumbhulpoor . . . . .	4,693	800,000	Sumbhulpoor . . . . .	21 29	84 0	1850
<b>ORISSA PROVINCE:—</b>						
Midnapore and Hidgellee . . . . .	5,029	666,328	Midnapore . . . . .	22 25	87 23	1760
Cuttack and Pooree . . . . .	4,829	1,000,000	Cuttack . . . . .	20 28	85 55	1803
Balasure . . . . .	1,876	556,395	Bilasure . . . . .	21 30	87 0	"
Koordah . . . . .	930	571,160	Koordah . . . . .	20 10	85 43	"
<b>MADRAS PRESIDENCY:—</b>						
Ganjam . . . . .	6,400	926,930	Ganjam . . . . .	19 24	85 7	1765
Vizagapatam . . . . .	7,650	1,254,272	Vizagapatam . . . . .	17 41	83 21	"
Rajamundry . . . . .	6,050	1,012,036	Rajamundry . . . . .	17 0	81 50	"
Masulipatam . . . . .	5,000	520,866	Masulipatam . . . . .	16 10	81 12	1759
Guntoor . . . . .	4,960	569,968	Guntoor . . . . .	16 20	80 30	1788
Bellary . . . . .	13,056	1,229,599	Bellary . . . . .	15 9	76 59	1800
Cuddapah . . . . .	12,970	1,451,921	Cuddapah . . . . .	14 28	78 52	"
North Arcot . . . . .	6,800	1,485,873	Chittoor . . . . .	13 12	79 9	1751
South Arcot . . . . .	7,610	1,006,005	Cuddalore . . . . .	11 42	79 50	"
Chingleput and Madras . . . . .	3,050	1,283,462	Madras . . . . .	13 6	80 21	1765
Salem . . . . .	8,200	1,195,367	Salem . . . . .	11 39	78 14	1792
Coimbatore . . . . .	8,280	1,153,862	Coimbatore . . . . .	11 0	77 2	1799
Trichinopoly . . . . .	3,000	709,196	Trichinopoly . . . . .	10 48	78 46	1801
Tanjore . . . . .	3,900	1,676,068	Tanjore . . . . .	10 48	79 11	1799
Madura . . . . .	10,700	1,756,791	Madura . . . . .	9 55	78 10	1801
Tinnivelly . . . . .	5,700	1,269,216	Tinnivelly . . . . .	8 44	77 44	1801
Malahar . . . . .	6,060	1,514,909	Calicut . . . . .	11 15	75 50	1792
Canara . . . . .	7,720	1,056,333	Mangalore . . . . .	12 52	74 54	1799
Nellore . . . . .	7,930	935,690	Nellore . . . . .	14 27	80 2	1801
Kurnool . . . . .	3,243	273,190	Kurnool . . . . .	15 50	78 5	1838
Coorg . . . . .	1,420	{ 65,437 in 1836 }	Merkara . . . . .	12 27	75 48	1834
<b>BOMBAY PRESIDENCY:—</b>						
Concan, North . . . . .	5,477	815,849	Tannah . . . . .	18 57	72 53	1818
"    South . . . . .	3,964	665,238	Rutnageriah . . . . .	17 0	73 20	"
Bombay Island . . . . .	18	566,119	Bombay . . . . .	18 57	72 52	1661
Dharwar . . . . .	3,837	754,385	Dharwar . . . . .	15 28	75 4	1818
Poona . . . . .	5,298	666,006	Poona . . . . .	18 31	73 53	"
Kandeish . . . . .	9,311	778,112	Malligaum . . . . .	20 32	74 30	"
Surat . . . . .	1,629	492,684	Surat . . . . .	21 9	72 51	1759
Broach . . . . .	1,319	290,984	Broach . . . . .	21 42	73 2	1803
Ahmednuggur . . . . .	9,931	995,585	Ahmednuggur . . . . .	19 6	74 46	1817
Shelapore . . . . .	4,991	675,115	Sholapore . . . . .	17 40	76 0	1818
Belgaum . . . . .	5,405	1,025,882	Belgaum . . . . .	15 50	74 36	1817

POPULATION BY PROVINCES AND DISTRICTS.

501

British Territories in Continental India—Area, Chief Towns, and Position.

Provinces, Districts, &c.	Area in Square Miles.	Population.	Principal Town.	Position of Town.		Date of Acquisition.
				Lat. N.	Long. E.	
<b>BOMBAY PRESIDENCY—continued.</b>						
Kaira . . . . .	1,869	580,631	Kaira . . . . .	22° 43'	72° 40'	1803
Ahmedabad and Nassik . . . . .	9,931	995,585	Ahmedabad . . . . .	23 0	72 36	1818
Sattara . . . . .	10,222	1,005,771	Sattara . . . . .	17 40	74 3	1848
<b>BERAR PROVINCE:—</b>						
Deogar above the Ghauts . . . . .	76,432	4,650,000	Chindwara . . . . .	22 3	78 58	1854
"    below the Ghauts . . . . .			Nagpore . . . . .	21 10	79 10	"
Wein-Gunga . . . . .			Bundara . . . . .	21 11	79 41	"
Choteesgurh . . . . .			Ryepore . . . . .	21 11	81 40	"
Chandarpore . . . . .			Chandah . . . . .	19 57	79 23	"
<b>NERBUDDA DISTRICTS:—</b>						
Saugor . . . . .	1,857	305,594	Saugor . . . . .	23 50	78 49	1818
Jubbulpore . . . . .	6,237	442,771	Jubbulpore . . . . .	23 10	80 1	"
Hoosungabad . . . . .	1,916	242,641	Hoosungabad . . . . .	22 44	77 44	"
Seuni . . . . .	1,459	227,070	Seuni . . . . .	22 1	79 40	"
Dumoh . . . . .	2,428	363,584	Dumoh . . . . .	23 49	79 30	"
Nursingpore . . . . .	501	254,486	Nursingpore . . . . .	24 0	79 28	"
Baitool . . . . .	990	93,441	Baitool . . . . .	21 50	77 58	"
<b>AGRA PRES., OR N.W. PROV.:—</b>						
Benares . . . . .	995	851,757	Benares . . . . .	25 17	83 4	1775
Ghazee-pore . . . . .	2,181	1,596,324	Ghazee-pore . . . . .	25 32	83 39	"
Azimghur . . . . .	2,516	1,653,251	Azimghur . . . . .	26 0	83 14	1801
Goruckpore . . . . .	7,340	3,087,874	Goruckpore . . . . .	26 42	83 24	"
Jomnpore . . . . .	1,552	1,143,749	Jomnpore . . . . .	25 44	82 45	1775
Allahabad . . . . .	2,788	1,379,788	Allahabad . . . . .	25 26	81 45	1801
Banda . . . . .	3,009	743,872	Banda . . . . .	25 27	80 23	1803
Futtehpore . . . . .	1,583	679,767	Futtehpore . . . . .	25 57	80 54	1801
Cawnpore . . . . .	2,348	1,174,556	Cawnpore . . . . .	26 29	80 25	"
Etawah . . . . .	1,677	610,965	Etawah . . . . .	26 46	79 5	"
Furruckabad . . . . .	2,122	1,064,607	Furruckabad . . . . .	27 24	79 40	"
Shajehanpore . . . . .	2,308	986,096	Shajehanpore . . . . .	27 52	79 58	"
Allyghur . . . . .	2,153	1,134,565	Allyghur . . . . .	27 56	78 8	1817
Bareilly . . . . .	3,119	1,378,268	Bareilly . . . . .	28 23	79 29	1801
Moradabad . . . . .	2,698	1,138,461	Moradabad . . . . .	28 50	78 51	"
Agra . . . . .	1,864	1,001,961	Agra . . . . .	27 10	78 5	1803
Delhi . . . . .	789	435,744	Delhi . . . . .	28 38	77 19	"
Saharunpore . . . . .	2,162	801,325	Saharunpore . . . . .	29 58	77 36	1803
Paniput . . . . .	1,269	389,085	Paniput . . . . .	29 23	77 2	"
Hissar . . . . .	3,294	330,852	Hissar . . . . .	29 8	75 50	"
Rohtuk . . . . .	1,340	377,013	Rohtuk . . . . .	28 54	76 38	"
Goorgaon . . . . .	1,939	662,486	Goorgaon . . . . .	28 23	77 5	"
Mozuffernuggur . . . . .	1,646	672,861	Mozuffernuggur . . . . .	23 28	77 45	1836
Meerut . . . . .	2,200	1,135,072	Meerut . . . . .	28 59	77 46	"
Booldshuhur . . . . .	1,823	778,342	Burrn . . . . .	28 24	77 56	1803
Bijnore . . . . .	1,900	695,521	Bijnore . . . . .	29 22	78 11	1802
Budaon . . . . .	2,401	1,019,161	Budaon . . . . .	28 2	79 11	"
Muttra . . . . .	1,613	862,909	Muttra . . . . .	27 30	77 45	1803
Mynpoory . . . . .	2,020	832,714	Mynpoory . . . . .	27 14	97 4	"
Humeerpore . . . . .	2,241	548,604	Humeerpore . . . . .	25 58	80 14	1802
Mirzapoor . . . . .	5,152	1,104,315	Mirzapoor . . . . .	25 6	82 38	1801
Jaloun . . . . .	1,873	176,297	Jaloun . . . . .	26 9	74 24	"
Ajmere . . . . .	2,029	224,891	Ajmere . . . . .	26 29	74 43	1817
Mairwarra . . . . .	282	37,715	Nyanugga . . . . .	26 6	74 25	"
<b>CIS SUTLEJ:—</b>						
Umballah . . . . .	293	67,134	Umballah . . . . .	30 24	76 49	1847
Loodianah . . . . .	725	120,898	Loodianah . . . . .	30 55	75 54	"
Kythul and Ladwa . . . . .	1,538	164,805	Kythul . . . . .	29 49	76 28	1843
Ferozepore . . . . .	97	16,890	Ferozepore . . . . .	30 55	75 55	1835
Seik States . . . . .	1,906	249,686	Patialah . . . . .	30 20	76 25	"
<b>PUNJAB:—</b>						
Jhelum . . . . .	13,959	1,116,035	Jhelum . . . . .	32 56	73 47	1849
Lahore . . . . .	13,428	2,470,817	Lahore . . . . .	31 36	74 21	"
Leia . . . . .	30,000	1,500,000	Leia . . . . .	30 57	71 4	"
Mooltan . . . . .	14,900	500,000	Mooltan . . . . .	30 12	71 30	"
Jullunder . . . . .	1,324	569,722	Jullunder . . . . .	31 21	75 31	1846
Peshawur . . . . .	4,836	{ about } 850,000	Peshawur . . . . .	34 71	71 38	1849
Kangra . . . . .			Kangra . . . . .	32 5	76 18	"
<b>SCINDE PROVINCE:—</b>						
Kurrachee . . . . .	16,000	185,550	Kurrachee . . . . .	24 56	67 3	1843
Shikarpore . . . . .	6,120	350,401	Shikarpore . . . . .	28 1	68 39	"
Hydrabad . . . . .	30,000	551,811	Hydrabad . . . . .	25 12	69 29	"
<b>ULTRA-GANGETIC DISTRICTS:—</b>						
Arracan . . . . .	15,104	321,522	Akyab . . . . .	20 10	92 54	1826
Assam, Lower . . . . .	8,948	710,000	Gowhaty . . . . .	26 9	91 45	"
Assam, Upper . . . . .	12,857	260,000	Seebpore . . . . .	27 0	94 40	"
Goalpara . . . . .	3,566	400,000	Goalpara . . . . .	26 8	90 40	1765
Cossya Hills . . . . .	729	10,935	Chirra Ponjee . . . . .	25 14	91 45	1826
Cacher . . . . .	4,000	60,000	Silehar . . . . .	24 49	92 50	1830
Tenasserim, Mergui, Ye, &c. . . . .	29,168	115,431	Mergui . . . . .	12 27	98 42	1826
Pegu Province . . . . .	25,000	550,000	Prome . . . . .	17 40	96 17	1853

502 DENSITY OF POPULATION IN DIFFERENT PARTS OF INDIA.

A more recent return (28th July, 1855) from the East India House, gives the population of India thus:—

*British States.*—Bengal, &c., 59,966,284; N. W. Provinces, 30,872,766; Madras, 22,301,697; Bombay, 11,109,067; Eastern settlements, 202,540: total, 124,452,354.

*Native States.*—Bengal, 38,259,862; Madras, 4,752,975; Bombay, 4,460,370: total, 47,473,207.

*Foreign States.*—French settlements, 171,217; Portuguese ditto, not known. Grand total, 172,096,778.\*

The varying degree of density of population to area forbids reliance being placed on any mere "estimates," or "approximations to actual amount." Thus in Bengal, Behar, and Cuttack, the number of mouths to each square mile is stated to be—in Jessore, 359; Moorshedabad, 394; Bhagulpoor, 318; Patna, 506; Cuttack, 220; Dacca, 193; Chittagong, 324: average of all, 324.† These are high ratios; but the soil is fertile, and the inhabitants very numerous along the banks of rivers. In Assam, on the N.E. frontier of Bengal, and along the rich valley of the Brahmapootra, the density is placed at only 32 to the square mile; in Arracan, at 21; Tenasserim provinces, at 4; on the S.W. frontier (Chota Nagpoor, &c.), at 85; in the Saugor and Nerbudda territories, at 109; in the non-regulation provinces, Kumaon, Ajmeer, &c., at 44.

The census of the Madras Presidency (*see Appendix*) shows, on an area of 138,279 sq. m., a population of 22,281,527, or 161 persons to each sq. m. In some districts the inhabitants are much more thinly scattered: for instance, at Kurnool, 84; at Bellary, 94; at Masulipatam, 104; the highest is the rich district of Tanjore, with 430 to each

\* The sum of 124,452,354 is a higher figure than the Anglo-Indian subjects of the British crown have hitherto been rated, and is probably the result of a more accurate numbering of the people: thus, until a census now (July, 1855) in progress was made of the Punjab, the population was, as usual, under-estimated. According to the *Lahore Chronicle* of 30th of May, 1855, the returns then received show for Lahore, 3,458,322; Jhelum, 1,762,488; Cis-Sutlej, 2,313,969: which are higher figures than those given from the Parliamentary Papers, at previous page. The enumerations made up to May last, for the Punjab, gave 10,765,478; and it was supposed that the grand total, when completed, would be about eleven million and a-half, or nearly four million more than the official document previously given for the Punjab and Cis-Sutlej states. In my first work on India, twenty years ago, I assumed the population under British jurisdiction to be about one hundred million, which some con-

sidered an exaggeration; the above augmentation of twenty-four million is accounted for by the addition of new states, such as the Punjab. I have little doubt that an accurate census will show a larger aggregate than 124,000,000.

Districts.	Square M.	Population.	Mouths to each sq. m.
Agra . . . . .	9,298	4,373,156	465
Allahabad . . . . .	11,971	4,526,607	378
Benares . . . . .	19,737	9,437,270	478
Delhi . . . . .	8,633	2,195,180	254
Meerut . . . . .	9,985	4,522,165	453
Rohilcund . . . . .	12,428	5,217,507	419
Total . . . . .	72,052	30,271,885	420

By the two full censuses of Madras and the N. W. Provinces, we gain at last a fair estimate of the small number of Mohammedans, as compared with the Hindoos, in India: the Madras census of 1850-'1, shows, on a total of 21,581,572, that the *adult* Hindoos numbered 13,246,509; Mohammedan adults and others, 1,185,654: the *children*—Hindoos, 6,655,216; Mohammedans and others, 594,193: total census (exclusive of Madras city and suburbs, containing 700,000)—

Class.	Males.	Females.	Total.
Hindoos . . . . .	10,194,098	9,707,627	19,901,725
Mohammedans and others. } . . . . .	852,978	826,869	1,679,847
Total . . . . .	11,047,076	10,534,496	21,581,572

The proportion of Moslems to Hindoos in Southern India, is as one to ten.

The N. W. Provinces return, in 1852-'3, shows—

Class.	Males.	Females.	Total.
Hindoos . . . . .	13,803,645	11,920,464	25,724,109
Mohammedans and others. } . . . . .	2,376,891	2,170,880	4,547,771
Total . . . . .	16,180,536	14,091,344	30,271,880

† I obtained in India, in 1830, "a census," or rather estimate of these districts, showing an aggregate of area in sq. m., 153,792; villages, 154,268; houses, 7,781,240; mouths, 39,957,561: or about one village to each sq. m. of 640 acres, five houses to each village, five and a-half persons to each house, and 259 mouths to each sq. m. (*See my first History of the British Colonies*, vol. i., Asia; 2nd edition, p. 166: published in 1835.)

‡ As regards the censuses of Madras and the N.W. Provinces, I have seen no details given of the means adopted to ensure an accurate enumeration in a single day; they must, I think, be considered as "near approximations" to truth: they appear to be the best yet obtained.

Delhi, Agra, and the adjacent provinces, have for several centuries been the strongholds of the Moslems; yet even here their numbers (including "other" denominations not Hindoos) is only four million to twenty-five million. In 1830, I estimated the total Mohammedan population of India at fifteen million, and recent investigations justify this estimate.

A census of Agra and its suburbs (excluding inmates of bungalows round about the city, and the domestics attached thereto, about 3,000 in number, and also the inhabitants of bazaars and villages in military cantonments) was made in 1844-'45, after seven months' careful examination: the result showed a population of 103,572, with an excess of 8,245 Hindoos over Mohammedans, in this a former seat of Moslem rule; the grand total of houses was 15,327.

A census, in 1829, of Moorshedabad city and district, the head-quarters of the former Mohammedan ruler of Bengal, showed—Hindoos, 555,310; Mussulmen, 412,816 = 968,126: proportion of sexes—*Hindoo*, males, 286,148; females, 269,162: Mussulmen, males, 216,878; females, 196,344: number of houses, Hindoo, 123,495; Mussulmen, 84,734. Allahabad city census in 1831-'2, gave—of Hindoos, 44,116; Mussulmen, 20,669. Allahabad district—Hindoos, 554,206; Mussulmen, 161,209; in the city, the Hindoos were in the proportion of two to one; in the district, of more than three to one.

The population of Calcutta has been a matter of wide estimate, and is in proof of the past neglect of statistical inquiries: in July, 1789, the inhabitants of the Anglo-Indian metropolis were *guessed* at 400,000; at the commencement of the present century, about one million; in 1815, at half a million; in 1837, an imperfect census gave a quarter of a million (229,714); and in 1850, a more complete census showed nearly half a million (413,182), comprising only those residing within the City Proper, bounded by the Mahratta ditch, or limits of the supreme court: the dense population of the suburbs, probably exceeding half a million, are not stated; nor, I believe, the floating mass of

people who pass into and out of Calcutta daily; viz., 72,425, of whom 10,936 cross the river diurnally in ferries.

Resume of Censuses.	1850.		1837.
	Males.	Females.	
Europeans . . . . .	6,233	6,479	
Eurasians (mixed blood) . . . . .	4,615	4,746	
Armenians . . . . .	892	636	
Chinese . . . . .	847	362	
Asiatics and low castes . . . . .	15,342	21,096	
Hindoos . . . . .	274,335	137,651	
Mohammedans . . . . .	110,918	58,744	
Total . . . . .	413,182	229,714	

It is usual to speak of India as if it were inhabited by a single race: such is not the case; the people are more varied in language, appearance, and manners, than those of Europe.\* About twenty languages are extensively spoken; viz., (1.) *Hindoostanee*, in pretty general use, particularly in the N.W. Provinces, and usually by Mussulmen† throughout India; (2.) *Bengallee*, in the lower parts of the Gangetic and Brahmapootra plains; (3.) *Punjabee* or *Seik*, in the upper portion of the Indies; (4.) *Sindhee*, in Cis-Sutlej states and *Sinde*; (5.) *Tamul*, around Madras and down to the coast of Cape Comorin; (6.) *Canarese* or *Karnata*, in Mysoor and Coorg; (7.) *Malyalim*, in Travancore and Cochin; (8.) *Teloogoo* or *Telinga*, at Hyderabad (Deccan), and eastward to coast of Bengal Bay; (9.) *Oorya*, in Orissa; (10.) *Cole* and *Gond*, in Berar; (11.) *Mahratta*, in Maharashtra; (12.) *Hindee*, in Rajpootana and Malwa; (13.) *Guzerattee*, in Guzerat; (14.) *Cutchee*, in Cutch; (15.) *Cashmerian*, in Cashmere; (16.) *Nepaulese*, in Nepal; (17.) *Bhote*, in Bootan; (18.) *Assamese*, Up. Assam; (19.) *Burmese*, in Arracan and Pegu; (20.) *Brahooi*, or *Beloochee*, in Beloochistan; Persian and Arabic sparingly, and numerous dialects in different localities.

In Bengal and Orissa the majority of the people do not eat meat, and the abstinence is ascribed to a religious precept forbidding the destruction of life: but almost every Hindoo eats fish; several consume kid flesh (especially when sacrificed and offered to idols),

is sometimes the Deva Nagri (Sanscrit), but more generally the Arabic alphabet. Although the great majority of the people of India are usually termed Hindoos as regards creed, there is as slight a bond of union among them on that account as there is among the professing Christians in Europe, and as much diversity in reference to practices supposed to be connected with their religious faith.

\* Principal languages: English, French, Portuguese, Spanish, Italian, German, Russ, Polish, Turkish, Greek, Dutch, Danish, Swede, Norwegian, Finn = 15.

† This tongue was formed as a medium of colloquial intercourse in 1555, by the Emperor Akber, out of *Hindee*, the primitive language of the Hindoos, and Arabic and Persian, which were used by the Mohammedan conquerors: the character adopted

and also birds. Numerous Brahmins and Rajpoots of the highest castes, in N. and W. India, partake of goat, deer, and wild boar; while they abhor the domestic sheep and swine: others who use the jungle cock, (similar to our game-cock), would deem the touch of barn-door poultry pollution. Some classes feed on descriptions of provender which are rejected by others: at Bikaner, all the Hindoos profess an abhorrence of fish; at Kumaon, they will masticate the short-tailed sheep of the hills, but not the long-tailed one of the plains; people will buy baked bread, but would lose caste if they touched boiled rice cooked by these very bakers: an earthen pot is polluted past redemption if touched by an inferior caste; a metal one suffers no such deterioration: some tribes allow a man to smoke through his hands from the bowl (*chillum*) which contains the tobacco, but would not suffer the same person to touch that part of the *hookah* which contains the water. Other instances of diversity might be multiplied. Even the religious holidays of Bengal are different from those observed in the N. W. Provinces. The barbarous ceremonies of Juggernaut, and the abominations of the Churruk Poojah (where men submit themselves to be swung in the air, with hooks fastened through their loins), are unknown in N. and W. India. In some parts, female infanticide is or was wont to be almost universal; in others it is held in just abhorrence: in some districts, polygamy prevails; in others polyandria—one woman being married to all the brothers of a family, in order to retain property among them;—*here* the marriage of a daughter is a great expense,—*there* a source of profit, as the husband buys his bride, and has the right to sell her, and even to mortgage her for a definite time as security for a debt.

Independent of the division of the Hindoos into castes—Brahmins, Cashtriya, Vaisyas, and Soodras,—and the subdivision of society into numerous hereditary classes, there are other diversities, arising probably from origin of race, and the peculiarities engen-

\* A comparatively small portion of the Hindoo population live on rice; the majority eat wheat and other grain, as also various species of pulse.

† In Calcutta, where a variety of races, or, as they may more properly be termed *nations*, are collected, the peculiarities of each are readily ascertainable, and their antagonisms quickly manifested. Among twenty persons in my service at one time in Bengal, there were (excepting four Balasore palanquin-

dered during a long course of time by climate and food: thus the brave Rajpoot and the bold Mahratta are decided antagonists; but both view, with something of contempt, the peaceful, subtle, rice-feeding\* Bengallee, whose cleanly, simple habits are outraged by the gross-feeding, dirty Mughs of Arracan, who object not to a dish of stewed rats or snakes, or even to a slice of a putrefying elephant. The Coromandel men have features and modes of thought distinct from those of the Malabar coast; while inhabitants of the Kattywar peninsula differ essentially from both. The dwellers on the cool and dry hills and plateaux, present a marked contrast to those who reside in the hot and humid plains and valleys; and the aborigines, such as the Gonds of Berar, present no similarity whatever to the fine mould and beautifully-chiselled head and face, arched nose, and olive hue, of the pure Hindoo, or to the large-boned, massive frame, and manly cast of the hard-featured, genuine Moslem.

The variety of races in India are so decided, that an experienced officer will at once say whether a soldier belongs to the respective departments of the army of Bengal, of Madras, or Bombay; and further, whether a Hindoo is from Rajpootana, from Oude, from the Deccan, from the coast, or elsewhere.†

With regard to the Mohammedans, irrespective of their local aversions, they are divided into two sects—Soonce and Shea,—who abhor each other as cordially as the members of the Latin and Greek church do, or as the Romanists and Orangemen of Ireland, and are equally ready to fight and slay on a theological point of dispute. Then, besides these two leading divisions of the population, there are several million persons under the denominations of Jains or Buddhists, who consume no animal food or fermented beverage; Seiks, who eat the flesh of the cow, and drink ardent spirits; Parsees or Guebers (erroneously termed “fire-worshippers”), Latin, Protestant, Nestorians, or Syriac and Armenian Christians, —Jews,‡ and a mixed race sprung from the

bearers, a tribe bearing a high repute for honesty), not two of the same race; consequently much mutual distrust, frequent quarrels, bickering, and fighting.

‡ Stavorinus adverts, in 1775—’78, to the colony of Jews at Cochin, who, he says, “although most of them are nearly as black as the native Malabars, they yet retain, both men and women, those characteristic features which distinguished this singular people from all other nations of the earth.”—

marital union of all—some of one creed, some of another: added to these are the *Eurasians*, born of European fathers and Indian mothers; a rapidly increasing class, probably destined, at some future day, to exercise an important influence in the East.

Before passing from the subject of the numbers and variety of the people, I would wish to draw public attention to a large and most interesting section of them, to whom reference has been made previously, as the aborigines of India. They are scattered over every part of the country, generally in the hilly districts; and although speaking different dialects,\* and of varying appearance, manners, and customs, they are considered by General Briggs and Mr. Hodgson (who have studied their peculiarities) as having their origin from a common stock. Of their number throughout India we know nothing; they must amount to several million human beings, whose character is thus summed up:—"The man of the ancient race scorns an untruth, and seldom denies the commission even of a crime that he may have perpetrated, though it lead to death: he is true to his promise; hospitable and faithful to his guest, devoted to his superiors, and always ready to sacrifice his own life in the service of his chief; he is reckless of danger, and knows no fear."† It may be added, that he considers himself justified in levying "black mail" on all from whom he can obtain it, on the ground that he has been deprived of his possession of the soil by the more civilised race who have usurped the territory. The aborigines are distinguished from the Hindoos by several marked

(*Voyages to East Indies*, vol. iii., p. 226.) They had then "a very beautiful and authentic copy of the Pentateuch," but know not when or where they derived it. Their own statement is, that they are of the posterity of the ten tribes carried away into captivity by Shalmaneser, and who, after being liberated from their Assyrian bonds, came hither, where they have from time immemorial constituted a small but isolated community, and enjoyed for a series of ages valuable privileges, including the exercise of their religion without restraint. Their houses, in a separate town, are built of stone, plastered white on the outside, and they have three synagogues; most of them are employed in trade, and some are very wealthy. How these Jews became black is not known; but according to Stavorinus, when they purchase a slave he is immediately circumcised, manumitted, and received into the community as a fellow Israelite. By intermarriages with such converts, the colour, in process of time, may have become perfectly dark, while the peculiar physiognomy was perpetuated in the race of mixed blood, as I have noticed is generally the case with the descendants, by male fathers, of the English,

customs: they have no castes; eat beef and all sorts of animal food; drink, on every possible occasion, intoxicating beverages (no ceremony, civil or religious, is deemed complete without such drink); have no aversion to the shedding of blood; atone for the sins of the dead by the sacrifice of a vietim; widows marry and do not burn; they are ignorant of reading or writing, and usually live by the chase and by pastoral pursuits. Some tribes take their designation from the country they inhabit: Gonds, in Gondwana; Koles or Kolis, in Kolywara; Mirs or Mairs, in Mairmara; Bheels or Bhils, in Bhilwara and Bhilwan; Benjees, in Bengal, &c. Other tribes, such as the Todawurs of the Neilgherries, have designations of which the origin is unknown.

The men are nearly naked; the women wear a cloth wrapper round the waist, carried over the left shoulder and under the right arm; they live mostly in conical thatched hovels, apart from the dwellings of the Hindoos, by whom they are treated as outcasts, and have no valuables but asses and dogs. As watchmen and thief-takers they are of great use, from their fidelity, sacred regard for truth, and the skill evinced in following a foot-track: they are entrusted with the care of private property to a large amount, and convey the public revenue to the chief towns of districts—a duty which they perform with scrupulous care and punctuality.

An unseen deity is worshipped; prayers are offered to avert famine and disease, and for preservation from wild beasts and venomous reptiles: to propitiate the favour

French, Spanish, and Portuguese. There is a colony of white Jews at Mattacherry, or *the Jews' town*, a suburb of Cochin; they regard the black Jews as an inferior caste: the former say that they came to Cranganore after the destruction of the second temple, and that they have a plate of brass in their possession since the year A.D. 490, which records the grant of land and privileges conceded to them by the king of that part of India: a copy of it is now in the public library at Cambridge. By discord and meddling in the disputes of the natives, the Cranganore Jews brought destruction on themselves at the hands of an Indian king, who destroyed their strongholds, palaces, and houses, slew many, and carried others into captivity. The Jews have a never-ceasing communication with their brethren throughout the East. For fuller details of these white and black Israelites, see Hough's *History of Christianity in India*, vol. i., 464.

\* They seem to be connected with the Tamul and other languages of Southern India, and have no affinity with the Sanscrit.

† *Lectures on the Aboriginal Race of India*; by Lt.-General Briggs: 1852, p. 13.

or appease the anger of the object of adoration, living sacrifices (in some cases human beings) are deemed essential; and the blood of the victim is retained in small vessels by the votaries. All social and religious ceremonies are accompanied by feasting, drinking, and dancing; the latter performed, sometimes, by several hundred women (their hair highly ornamented with flowers) grouped in concentric circles, each laying hold with one hand on her neighbour's cincture or waist, and beating time with the heels on the ground. In figure they are well made and sinewy; rather low in stature; face large or flat, and wide; eyes black and piercing; nose-bridge depressed, nostrils expanded, mouth protruding, lips large, little or no beard: altogether presenting a marked contrast to the Apollo-like form of the genuine Hindoo.\*

Several benevolent governmental servants have undertaken the civilisation of different tribes, and by kindness and tact effected considerable improvement in their habits and condition. When disciplined, they make brave and obedient soldiers, are proud of the consideration of their European officers, to whom they become ardently attached, and are ready to follow them abroad, on board ship, or wherever they go. The aborigines of the Carnatic formed the leading sepoy of Clive and Coote; and at the great battle of Plassy they helped to lay the foundation of the Anglo-Indian empire.† The *Bengies*, who are found in all parts of the Gangetic plain, when serving in the Mohammedan armies, claimed as *indigenes* the honour of leading storming parties. In the defence of Jellalabad, under the gallant Sir R. Sale, the *Pariahs* (out castes, or low castes, as the aborigines are termed) evinced the most indomitable courage and perseverance, as they have done at Ava, or wherever employed in the pioneer and engineer corps. These hitherto neglected races may be turned to beneficial uses. The tribe termed *Ramoosees*, or foresters, became the active and indefatigable infantry, who enabled Sevajee to conquer from the Moguls the numerous hill forts which formed the basis of the Mahratta dominion. The *Bheels* have long been celebrated in Western India annals, and

their deeds recorded by Malcolm, Tod, &c.: as a local militia, they rendered good service in Candeish. The *Southals* of Bhagulpoor, reclaimed by the noble-minded civilian Cleveland, have now one of the finest regiments of the British army, recruited from their once despised class. The *Mairs* of Mewar are selected to guard the palace and treasury of the Rajpoot rajah, and form the only escort attendant on the princesses when they go abroad. Hyder Ali had such confidence in the *Bedars* of Canara, that a body of 200 spearmen ran beside him, whether on horseback or in his palanquin, and guarded his tent at night.

SLAVERY IN INDIA.—During the early Hindoo sway, the aborigines were, as far as practicable, reduced to servitude; those who could not find refuge in the hills and jungles, were made *adscripti glebæ*, and transferred as predial slaves with the land. Under Moslem rule, this unhappy class was augmented by another set of victims of man's rapacity. Persons unable to pay the government taxes were sold into servitude; others who were reduced to extreme poverty voluntarily surrendered themselves as bondsmen, either for life or for a term of years, to obtain the means of existence: in many cases the children of the poor were bought by the wealthy for servants or for sensual purposes. Eunuchs and others employed in the harems and as attendants, were imported from Africa and other places. Hence slavery, domestic and predial, now exists in almost every part of India. Our government, even during the administration of Warren Hastings, were aware of the fact; but it was deemed politic not to interfere, for the same reasons that induced the long toleration of widow-burning and infanticide.

In 1830, I applied to Mr. Wilberforce on the subject, and urged the anti-slavery society to investigate the matter; but he considered it then most advisable to give all his attention to the West Indies. Evidence adduced before the East India parliamentary committee, in 1832, disclosed a dreadful state of human suffering among East Indian slaves, which was confirmed by subsequent investigations, when it was ascertained that the Anglo-Indian government were large

\* Some of the gipsy tribe of the aborigines whom I saw in the Deccan, were like their European brethren of the same class, and the women equally handsome: in the form of their encampment—asses, carts, and dogs—the tribe might have been con-

sidered a recent migration from Devonshire. Some gipsies, whose location I visited in China, presented similar characteristics.

† My authority for these statements is Lt.-general Briggs.



slaveholders in right of lands held in actual possession. Parliament, in 1831-'35, began to discuss the matter, and several eminent civil servants of the E. I. Cy. exerted themselves to elucidate the evils of this nefarious system. In December, 1838, I laid before the Marquis Wellesley a plan for the gradual but effectual abolition of slavery in India: it was highly approved by his lordship, who urged the adoption thereof on the Indian authorities. Some part of the plan\* was adopted: the government relinquished their right to slaves on escheated lands; reports were called for from the collectors and other public officers; and, on the 7th of April, 1843, an act (No. 5) was passed by the President of India in council, which declared as follows:—

"I. That no public officer shall, in execution of any decree or order of court, or for the enforcement of any demand of rent or revenue, sell or cause to be sold any person, or the right to the compulsory labour or services of any person, on the ground that such person is in a state of slavery.

"II. That no rights arising out of an alleged property in the person and services of another as a slave shall be enforced by any civil or criminal court or magistrate within the territories of the E. I. Cy.

"III. That no person who may have acquired property by his own industry, or by the exercise of any art, calling, or profession, or by inheritance, assignment, gift, or bequest, shall be dispossessed of such property, or prevented from taking possession thereof, on the ground that such person, or that the person from whom the property may have been derived, was a slave.

"IV. That any act which would be a penal offence if done to a free man, shall be equally an offence if done to any person on the pretext of his being in a condition of slavery."

Much, however, still remains to be done, until slavery be as effectually extinguished in the *East* as it has happily and beneficially been in the *West* India possessions of the British crown. There is no difficulty among the Hindoo population, as slavery is not a

\* My chief recommendations were—(1.) A committee of inquiry. (2.) A registry in each collectorate of male and female slaves, agrestic and domestic. (3.) District magistrates to report on the laws and customs in force. (4.) All children born after a certain date to be declared free. (5.) Slaves to have the same protection of the law as freemen; their evidence equally receivable in a court of justice. (6.) Ill-treatment to be followed by manumission. (7.) Masters no power to punish. (8.) Wife and children not to be separated. (9.) Slaves on government lands to be at once freed. (10.) No voluntary sale of individuals or of their children to be lawful. (11.) Transfers of slaves only in their respective districts. (12.) Slaves to be entitled to acquire and possess property, and to purchase manumission: magistrate to arbitrate in cases of disputed price. (13.) Magistrate to attend to the condition

question of *caste*; and with regard to Mohammedan laws, a Christian government cannot be expected to recognise that which is repugnant to the first principles of humanity. We know nothing certain of the number of slaves in Hindoostan; the estimates made are but guess-work: in Malabar,† Canara, Coorg, Tinnevely, and other parts of Southern India, the estimates are from a half to one million; for Bengal, or the N. W. Provinces, we have no estimates. In fact, we know not whether there be *one* or *ten* million slaves under the British government in Asia.

The foregoing illustrations sufficiently indicate that there is no homogeneity of population in India, no bond of union,—no feeling of patriotism, arising from similarity of origin, language, creed, or caste,—no common sentiment, founded on historic or traditional associations: there is therefore more security for the preservation of British authority; but there is greater difficulty in ameliorating the social condition of the mass of the people, which was deteriorated under Moslem tyranny, and is still, as compared to some past period, at a low ebb.

The discussion of this theme is beyond my appointed limits, and I can only offer a few passing observations. The Hindoos speak of having experienced three ages,—1. Gold and silver; 2. Copper and brass; 3. Earth and wood,—which form the component parts of their domestic utensils; but when these ages commenced and ended, there are no means of ascertaining.‡ Ere Tyre became a place for fishermen to dry their nets, the Hindoo-Phœnician e-commerce had an Asiatic renown: the speices of India were sought in the time of Solomon; the gossamer muslins of Dæcea, the and complaints of slaves, to pass summary judgment, and to report his proceedings annually to government, who were to send out queries, and call for reports on the nature and extent of slavery in each district, from the officers entrusted with supervision.

† Mr. Peggs and others estimate the number of slaves, in Malabar alone, at 147,000; in Canara, Coorg, Wynaad, Cochin, and Travancore, at 254,000; in Tinnevely, 324,000; Trichinopoly, 10,000; Arcot, 20,000; Assam, 11,300; Surat, 3,000. According to Buchanan, the number must be very large in Behar and in Bengal: and all authorities describe their condition as truly miserable;—stunted, squalid, and treated with far less care than the beasts of the field.

‡ The third age is still extant, as illustrated by the earthen water and cooking pots—*chatty*.

beautiful shawls of Cashmere, and the brocaded silks of Delhi, adorned the proudest beauties at the courts of the Cæsars, when the barbarians of Britain were painted savages. Embossed and filigree metals,—elaborate carvings in ivory, ebony, and sandalwood; brilliant dyed chintzes; diamonds, uniquely set pearls, and precious stones; embroidered velvets and carpets; highly wrought steel; excellent porcelain, and perfect naval architecture,—were for ages the admiration of civilised mankind: and before London was known in history, India was the richest trading mart of the earth. Ruined cities, such as *Gour*, the ancient capital of Bengal, which covered an area of seventeen miles,—*Beejapoor*, with its million of inhabited houses; *Mandoo*, with a wall twenty-eight miles in circuit; *Rajmahal*, the dwelling-place of an hundred kings; Palebothra and Canouj,—indicated a large urban class, who required to be fed by a proportionately numerous agrestic population. Hundreds of cave temples,\* equal in interior-size and architectural beauty to the noblest cathedrals of Europe, attest the depth of religious feeling among the worshippers; while gorgeous ceremonials and sensuous luxuries indicate the highest stage of Pagan refinement: but all afford a melancholy contrast to the poverty which now pervades the mass of the people, and to the dull intellectuality and idolatrous routine that at present extends over social life.†

An extensive study of Indian records leads to the conclusion that the decay of Hindoostan dates from the period of Mohammedan incursions and conquests. Afghan, Tartar, Patan, Mogul, Persian, Arab,

\* Such as those of Karli, Ellora, Elephanta, &c. Dr. Buist, of Bombay, in his eloquent advocacy of the claims of India, says—"These have been hewn out in the absence of gunpowder, and, fashioned without natural adjunct or addition of masonry into their present form, covered with rich and elaborate structures by the hand of man. The caves are grouped together so as to furnish places of worship, halls of instruction, and domiciles for the professors and their pupils, exactly on the plan of the universities which came into existence in Europe *two thousand years* after those of India were forgotten; indicating an amount of civilisation and demand for knowledge in the East twenty-four centuries ago."—(*Notes on India*: London, 1853, p. 10.) The number of temples in India is as yet imperfectly ascertained. Mount Aboo, 5,000 feet high, is covered and surmounted by these singular structures.

† See Dr. Buist's *Notes on India*.

‡ The desolating effect of Moslem sway over the fairest portion of Eastern Europe for nearly 400 years, notwithstanding the influences of surrounding

and other Moslem adventurers, here found the richest spoil and the most fertile field: swarming like locusts, and equally ravenous, successive hordes crossed the frontiers, slew all who opposed, and, by their tyranny and sensuality, pauperised and demoralised all whom they subjected to their sway. Hence entire regions became desolate, and famines frequent in the inhabited parts. One of these afflictions, prolonged from 1640 to 1655, was felt throughout India, but principally in Bengal and in the Deccan; another occurred in 1661, when Aurungzebe was endeavouring to collect fifty per cent. of the produce of the land: other famines, resulting from poverty and exactions (not, as is alleged, from unpropitious seasons), occurred at different times, followed as usual by sicknesses, and swept off millions of the inhabitants.

Then the fierce and long-continued struggles of the Rajpoot, Mahratta, and other Hindoo races in refusing to bow their necks to Islamite yoke; the frequent rebellions in distant provinces necessitating the maintenance of large armies for the support of imperial power at Delhi; the internecine contests between several Mogul viceroys for the extension of dominion; and the desolations of the Carnatic and of Southern India by those Moslem scourges Hyder Ali and his son Tippoo, must each and all, together with other collateral circumstances which cannot here be examined, have contributed to the rapid decay and impoverishment of the people of India, in a manner not dissimilar to the destruction and demoralisation of the Greeks, and the desolation of the fair regions of Asia Minor by the Turks.‡ That the Moguls have left traces behind civilisation, and with an active, intelligent, impressive character in the millions of Greeks subject to its sway, proves the incapability of Mohammedanism for that progressive improvement in society which pre-eminently marks Christianity as the true religion adapted for man. The Turks for three centuries lived among, yet apart, from the Greeks; during their intolerant rule, there was no social intercourse between the dominant and subject races; and, in matters of dispute, all law or justice was set aside, as the word or oath of a Christian was not recognised in their legal tribunals. The taxes levied were enormous; in the local country, where resistance to fiscal oppression was impossible, four-fifths of his produce was exacted from the agriculturist, independent of minor plunderings, of "presents," forced tribute to each new pasha or provincial governor, and of endless extortions by his satellites, which was required from all who had accumulated any wealth. As in India during the Mogul sway, so in Greece: there was no security for life, honour, and property; the virtue of woman, the labour of the peasant, the skill

them of some great works is undoubtedly true, but they were the work of Hindoo artificers, and such as conquerors exact from slaves;—palaces and fortresses, mosques and mausoleums, canals and tanks—the latter indispensable for the production of territorial revenue, which would fail without irrigation of the land: but the Mohammedans took as little root in India as the Romans did in Britain; and their power crumbled to pieces

of the artisan, were all at the mercy of sensual, barbarous, and cruel tyrants, from the sultan at Constantinople to the janissary in the smallest village; the whip and the bastinado, the sword and the rope, were the prime instruments of Turkish rule. As financiers and penmen, the Greeks, like the Hindoos, were entrusted sometimes with high offices, which the Mohammedans were incapable of executing. The Hindoos, especially the Mahrattas, made several attempts to destroy Moslem sway, but there was no effectual combination. The Greeks were successful by their union in 1821. After seven years of secret organisation, they commenced their efforts for independence. Instead of being met by any concessions, Gregory, the patriarch of their church,—although he had, at the bidding of the sultan, excommunicated and anathematised the strugglers for liberty, and released the *Philikoi* (members of the Secret Society) from their oath,—was seized on Easter eve, dragged ignominiously through the streets of Constantinople, and then strangled at the door of the church in which he recently officiated; the body was left hanging three days to be pelted at and made the jest of the populace, then cast into the Bosphorus. Three suffragan archbishops were hanged by a black executioner at different parts of the city, and many hundreds of the clergy were massacred by the populace. Then began a series of atrocities which ought to have caused the entire expulsion of the barbarians from Europe. Throughout every part of the wide-spread Turkish dominions there was an indiscriminate slaughter of the Christians; savage brigands from Anatolia and Kurdistan were brought across the Bosphorus, under a firman calling on all true Mohammedans for defence: a few wealthy Greek merchants, fearing what was coming, fled to Odessa, but for the mass of their countrymen there was no refuge or hope of escape; houses were broken open, and the inmates torn from their hiding-places and carried to slaughter; every Christian seen in the streets was instantly slain as if he were a mad dog; “the European ships in the harbour, and the houses of the foreign consuls were thronged by the unhappy Christians, but their asylum was disregarded; and the decks of British and French *merchant vessels* were deluged with the blood of those whom their captains had vainly endeavoured to protect. In a few days 10,000 Christians perished in that one city; the remnant of the Greek population there was scattered to the four winds of heaven; they wandered as beggars through the streets of Odessa, or starved in the ditches of the Byzantine suburbs.”—(See London *Times*, 5th October, 1853.) In Adrianople and Smyrna the streets were smeared with blood; and from the Danube to the Nile, wherever the Moslem held sway, the life of a Christian was not worth one hour’s purchase. Within the short space

of its own accord, leaving the sceptre which Baber, Akber, and Aurungzebe had wielded by military force, to be scrambled for by the strongest arm. We found the people of Bengal and of the Carnatic impoverished and oppressed; the oppression has been removed, but the poverty is as yet only slightly mitigated. On this topic I hope to offer, at the concluding section (if space permit), some points for consideration.

of a few weeks, in the year 1821, it is estimated that 40,000 Christians were slain; and during six years’ struggle for life and liberty, at least 100,000 perished. Perhaps of all the massacres, the fiendish character of the followers of the false prophet is best exemplified by that which took place in the beautiful and fertile island of Scio, of which an account is given in the columns of the *Annual Register*, 1822–’3. Suffice it to say, that a population which at the beginning of the year numbered 120,000, was in the month of July reduced to 900, and even these were in danger of perishing from the pestilence which ensued on the fearful slaughter of their countrymen. How many such scenes may have been acted in Hindoostan there were none to record. During the debates in parliament, pending the war between Russia and England, fearful illustrations were produced of the cruelty, oppression, exaction, and remorseless spirit which characterise the Mohammedans even at the present day. The consequences of Turkish rule, and the condition of a Christian village after an Osmanli invasion, are thus stated by Mr. Layard:—“Their church was in ruins; around were the charred remains of the burnt cottages, and the neglected orchards overgrown with weeds. A body of Turkish troops had lately visited the village, and had destroyed the little that had been restored since the Turkish invasion. The same taxes had been collected three times—and even four times over. The relations of those who had run away to escape from these exactions had been compelled to pay for the fugitives. The chief had been thrown, with his arms tied behind his back, on a heap of burning straw, and compelled to disclose where a little money that had been saved by the villagers had been buried.”—(*Times*, 14th March, 1851.) On the 4th July, 1853, Lord Stratford de Redcliffe wrote to his government that he was necessitated of late, and indeed for some years back, to bring to the knowledge of the Porte atrocious acts of cruelty, rapine, and murder, for which no effectual redress was provided. Doubtless there are many high-minded, trustworthy, and amiable men among the disciples of the Crescent. Asiatic travellers can record numerous instances of good offices received from Moslems—whether designated as Turks, Arabs, Persians, or Hindoos. Under the Anglo-Indian government, there are thousands of Mohammedans as “true to their salt,” as brave and kindly in their nature, as those of any other form of religion: but for civil government, the creed of the Koran is utterly unfit; indeed, Mohammed never designed it for aught but military power and despotic sway, which naturally corrupts the minds of those who long use these means to preserve their dominion,—to keep men morally and politically in bondage,—instead of fitting them in this world, by freedom and the exercise of their faculties, for an eternity of happiness.

*Locality and Physical Aspect of Districts, Provinces, and States of India.*

- PUNJAB**, or region of the "five rivers;" adjoining Afghanistan on the E.—A plain, sloping from N.E. to S.W.; north part, near Himalayas, hilly and mountainous. Pasturage and grazing-grounds.
- CIS-SUTLEJ TERRITORY**,—Between Sutlej and Jumna, and a strip of land between the Ghara river and Rajpootana. Bhawalpoor and Sirhind, a plain; hill-slates on Himalaya ridges, mountainous and richly wooded.
- CASHMERE**,—Western Himalaya. Cashmere Proper, a fertile valley, enclosed by mountains. Elevation of bottom, 5,500 to 6,000 ft.: lofty snow-clad ranges, N.W. to S.E., constitute the general configuration.
- BUSSAHR**,—Wonderful maze of some of the highest mountains in the world; general rise from S. to N.
- GURHWAL**,—Ranges of enormous height, with several valleys; the whole drained by the Ganges. Slope from N. and N.E.
- SINDE**,—Lower course and delta of Indus; between Beloochistan mountains and Great Desert. Low and flat. Some short ridges of hills in the W. part; towards the E. a desert. Mouths of Indus continually changing.
- CUTCH**,—S.E. of Sinde. Two parallel hilly ranges nearly intersect province.
- WESTERN RAJPOOTANA**,—Between Sinde and Bhawalpoor and Arravulli range. Mostly a plain, interspersed with sand-hills; rocky ridges extend in various directions.
- EASTERN RAJPOOTANA**,—Between Arravulli mountains and Malwa. Near the Arravulli a table-land, declining to N.E.: continuous parallel hilly ranges extend N.E. to the vicinity of Delhi.
- GUZERAT**,—S. of Cutch and Rajpootana. Very rugged, especially in Kattywar: hills connected with Vindhya, and part of W. Ghauts.
- MALWA (Central India)**,—Between Guzerat and Bundelcund. A plateau, supported by Vindhya range; elevation diminishing towards Northern Gangetic valley.
- BHOPAL, MALWA**,—Greater part a table-land, resting on N. side of Vindhya; declivity to N. A few streams find their way, through gorges in the chain, into Nerbudda, which flows along the S. frontier.
- GWALIOR, or SCINDIAH**,—Central India. N.E. part level, bare, and much cut up by ravines; S., the country becomes hilly; middle part, a plateau; slope to the N.; S. part crossed by Nerbudda valley.
- AHMEDABAD and KAIRA**,—Head of the Gulf of Cambay. Almost a perfect level; appearing as if the sea had abandoned it at no very remote period.
- KANDEISH**,—Both banks of Taptee river. Valley of Taptee, enclosed by hills 1,000 to 1,800 ft. high. Tracts formerly cultivated; now covered with jungle and infested with tigers.
- NORTHERN and SOUTHERN CONCANS**,—Along the sea from lat. 16° to lat. 20°, including Bombay. Valleys enclosed by spurs from W. Ghauts, through which a clear stream flows, until influenced by the tides. Ravines and gorges filled with jungle, harbouring beasts of prey, especially tigers.
- POONA**,—Deccan. High table-land; slope from N.W. to S.E. Intersected by numerous spurs from W. Ghauts: elevation diminishing towards S.E.
- SATTARA**,—Deccan. High table-land; slope from N.W. to S.E. Gradual but rugged declivity from W. Ghauts to S.E.
- DHARWAR, BELGAUM, and SHOLAPOOR**,—Deccan. Undulating plains, elevated from about 2,000 to 2,500 ft.; slope to the E. and N.E.
- HYDERABAD, or NIZAM'S DOMINIONS**,—Deccan. For the most part an undulating plain; declivity from W. to E.: many isolated hills and ranges, of moderate elevation.
- WESTERN DIVISION: MADRAS PRESIDENCY**,—Malabar coast. Low sea-coast, rising towards culminating ridge of W. Ghauts. Numerous narrow shallow rivers flowing E. to W. from Ghauts. Country hilly.
- TRAVANCORE**,—Malabar coast. Low sandy sea-coast; behind the W. Ghauts; attaining in some places an altitude of 7,000 ft.
- SOUTHERN DIVISION: MADRAS PRESIDENCY**,—Between Mysoor and Travancore, and Coromandel coast. E. parts level; towards the W. rising into mountains: Neilgherries and E. Ghauts supporting table-land of Mysoor.
- MYSOOR**,—S. of Deccan. High table-land; here and there huge masses of rock, apparently thrown tumultuously together.
- CENTRAL DIVISION: MADRAS PRESIDENCY**,—Between Mysoor and Coromandel coast. Bellary and Cuddapah district; a table-land, resting on stupendous wall of mountains. Coast districts low, interspersed with hills.
- NORTHERN DIVISION: MADRAS PRESIDENCY**,—W. side of Bay of Bengal. Low sea-coast (except a ridge extending along sea-shore in Vizagapatam district), hilly and mountainous to W. delta of Godavery and Kistna rivers.
- CUTTACK**,—Orissa coast. Low sandy shore; delta of Mahanuddy; inland, the Moghalbandi, a dry tract; then rises the hill country, closing down to the sea near Chilka lake, and near Balasore.
- CUTTACK MEHALS**,—Inland of Cuttack province. Very hilly. Forests of fine timber.
- SOUTH-WEST FRONTIER OF BENGAL**. Table-lands of Chota-Nagpoor, Sirgooja, and Mynpat; and mountains of Palamow, &c.
- ORISSA**,—Inland of Northern Circars. Table-land, supported by E. Ghauts: slope to W., to Godavery; to S., to Bay of Bengal, the rivers flowing through *ghats*, or passes; and to N. and N.E., to Mahanuddy.
- NAGPOOR, or BERAR**,—Between Saugor and Nerbudda, and the Circars; and the Godavery and Wein-Gunga, and upper course of Mahanuddy. In general of considerable elevation; slope from N.W. to S.E. Lanjhee range divides the territory into two hasins—one into Mahanuddy, and the other into Godavery. N. part rugged and mountainous; S.E. part hilly and woody.
- SAUGOR and NERBUDDA TERRITORY**,—On each bank of upper course of Nerhudda river. Considerably elevated tract: E. part a table-land, declining to W., to valley of Nerbudda; to the S. are the Sautpoora and Mahadeo mountains; to the N. the Vindhya, which is but the brow of a rugged plateau; elevation diminishing towards the N.
- REWAH**,—Adjoining Nerbudda territories on the N.E. W. and N.W. mountainous, rising in three successive plateaux: intersected by valley of Sone from W. to E. S. of this a table-land, contiguous to that of Sirgooja.
- BUNDELCUND STATES**,—Between Nerbudda territory and N. W. Provinces. Plain, little elevated above valley of Jumna; on the W. and S. a continuous range of hills; to the E. they close down upon the Ganges. Some of the rivers flow through the plain, or are precipitated in cascades over the brow of the high land.
- ALLAHABAD**,—N. W. Provinces. Plain, sloping from N.W. to S.E. Banks of Jumna high in some parts of Banda district.
- AGRA**,—N. W. Provinces. Plain, sloping from N.W. to S.E. A slightly elevated ridge extends along the Dooab, about midway between the Ganges and Jumna.
- BHURTPOOR**,—Gangetic plain. Level; slope to E. Small detached hills in N. part.
- MEERUT**,—N. W. Provinces. Plain; slope in Suharunpoor, Mozuffurnuggur and Meerut districts, from N. to S.; in Boolundshuhur and Allyghur, N.W. to S.E.
- DELHI**,—N. W. Provinces. Mostly level. Ridges in Goorgaon district 400 to 600 ft. above surrounding country.
- KUMAON**,—N. W. Provinces. Well defined mountain system. S. limit, Ghagur mountain; successive ranges rise higher and higher, until ultimately crowned by the culminating ridge of the stupendous Himalaya.
- ROHILCUND**,—N. W. Provinces. Level; slope from N.W. to S.E., and from N. to S.

- OUDE**,—Gangetic plain. Plain; declivity (avg. 7 in. per m.) from N.W. to S.E. Sub-Himalaya range on N. frontier.
- NEPAUL**,—S. of Himalaya; sustained by sub-Himalaya. Table-land average about 4,000 ft. Valleys, enclosed by lofty chains; sides covered with forests, surmounted by culminating ridge of snow-clad Himalaya.
- SIKKIM**,—Himalaya. Spurs from Himalaya; enclosing deep valleys.
- BENARES**,—N. W. Provinces. Plain on either side of Ganges. Declivity from N.W. to S.E., and from W. to E. In S. part of Mirzapoor dist., surface rises into a rugged table-land, being a continuation of the Vindhya chain.
- PATNA**,—Gangetic plain, Bengal. Sarun and Patna districts; and along Ganges, level; table-land in S.W. part of Shahabad, descent very abrupt; a rocky ridge in S. part of Behar district.
- BIHAR**,—Gangetic plain, Bengal. Generally flat; slope from W. to E. Rajmahal hills rise on river bank of Ganges, and stretch S. and S.W. through Bhagalpore district. Tirhoot diversified by undulations.
- MOORSHEDEBAD**,—Bengal. Rangpore and Pubna dists. low; Rajshay flat; hilly to W.; W. parts of Moorshebad and Beerbhoom hilly.
- JESSORE**,—Delta of Ganges, and river bank of Hooghly river (Calcutta district). Greater part level; even depressed in Jessore district; in W. parts of Hooghly, Burdwan, and Bancoora, rises into slight eminences.
- DACCA**,—E. Bengal. Declivity from N. to S.; intersected by Brahmapootra. Jyntea, hilly; Silhet, a hollow, swampy basin, enclosed on three sides by mountains.
- GARROW AND COSSYAH STATES**,—Assam. Hilly and mountainous; numerous streams.
- COCH BEHAR**,—Bengal. Level; slope to S.E.
- N.E. FRONTIER : ASSAM**,—N. of Burnah. Intersected by Brahmapootra, which receives the drainage of the sub-Himalaya from the N.; Garrows, Cossyhs, and Nagas from the S.; numerous clumps of abrupt hills.
- BIOTAN**,—Foot of E. section of Himalaya. Imperfectly known: a table-land resting on the sub-Himalaya, which rise from 5,000 to 6,000 ft. above Assam.
- NAGA TRIBES**,—Upper Assam. Range of mountains dividing Burmah from the British dominions.
- TIPPERAH**,—Bengal. Wild hilly regions: fertile tracts on Megna.
- MUNEEPOOR**,—Burmese frontier. Valley, enclosed by precipitous mountains.
- CHITTAGONG**,—Mouths of Brahmapootra, and N.E. side of Bay of Bengal. Sea-coast: plains,—backed by parallel ranges of lofty mountains, throwing off spurs in a W. direction. Drainage from E. to W.
- ARRACAN**,—E. side of Bay of Bengal. Extensive flats, intersected by numerous navigable salt-water creeks: ranges of mountains extending N. and S. Islands and fine harbours.
- PEGU**,—Lower course and delta of Irawaddy. Gradual slope from N. to S. N. of Prome, hilly: range skirting E. shore of Bay of Bengal, diminishing in height towards C. Negrais. Numerous passes.
- TENASSERIM PROVINCES**,—E. side of Bay of Bengal. Generally rugged: parallel ranges N. and S., and E. and W.; also extensive plains. High, bold islands, with many harbours.
- Islands on the Coast of India—Name, Locality and Position, Extent, Physical Features, and Remarks.*
- KAROOMBA**,—Gulf of Cutch; lat. 22° 27', lon. 69° 47'. ½ m. broad, and 3 m. long.
- BEYT, or BET**,—Gulf of Cutch; lat. 22° 28', lon. 69° 10'. About 3 m. long, and greatest breadth about ½ m. On the banks are situate a castle or fort, compact and imposing; lofty massive towers, mounted with iron ordnance. Many temples and shrines in honour of Crishna.
- DIU**,—Kattywar; lat. 20° 42', lon. 71°. About 7 m. long; breadth, varying from ½ to 2 m. (See *Diu—“Ports and Havens.”*)
- PERIM**,—Gulf of Cambay; lat. 21° 38', lon. 72° 19'. About 2 m. long, and ½ m. broad. Numerous organic remains embedded in conglomerate: various antiquities extant.
- BASSEIN**,—Concans; lat. 19° 25', lon. 72° 50'. About 11 m. long, and 3 m. broad; 35 sq. m. Irregular surface; amongst other eminences a high hill of tabular form, and a conical peak not quite so elevated.
- SALSETTE**,—Concans; lat. 19°—19° 18', lon. 72° 54'—73° 3'. 18 m. long, 10 m. broad; about 150 sq. m. Diversified by hills, some of considerable elevation. Keneri commands an extensive view.
- BOMBAY**,—Concans; lat. 18° 57', lon. 72° 52'. Length, 8 m.; average breadth, 3 m. Two parallel ranges of rocks of unequal length are united at their extremities by hills of sandstone. Malabar, Mazagon, and Parell hills are the principal elevations.
- ELEPHANTA, 'OR GARA-PORI**,—Bombay harbour; lat. 18° 57', lon. 73°. Rather less than 6 m. in circumference. Composed of two long hills, with a narrow valley. Famed for its excavated temples.
- KOLABAH**,—Concans; lat. 18° 38', lon. 72° 56'. Long neglected, as a barren rock, but fortified by the Maharratta, Sevajee.
- MALWUN**,—Concans; lat. 16° 4', lon. 73° 31'. Little elevated above the sea, and not easily distinguished from the main-land.
- RAMISERAM**,—Gulf of Manaar; lat. 9° 18', lon. 79° 21'. 14 m. long, and 5 m. broad. Low, sandy, and uncultivated. Sacred in Hindoo mythology; great pagoda.
- SAUGOR**,—Mouths of Ganges; lat. 21° 42', lon. 88° 8'. 7 or 8 m. long, and 4 m. broad. Salt manufacture formerly carried on. Island held in great veneration by the Hindoos.
- DON MANICK ISLANDS**,—Mouths of Megna; lat. 21° 55', lon. 90° 43'. Flat.
- LABADOR**,—Mouths of Megna; lat. 22° 22', lon. 90° 48'. Low.
- DECCAN SHABAZPORE**,—Mouths of Megna; lat. 22° 30', lon. 91°. Flat.
- HATTIA**,—Mouths of Megna; lat. 22° 35', lon. 91°. Level.
- SUNDEEP**,—Mouths of Megna; lat. 22° 30', lon. 91° 32'. About 18 m. long, and 6 m. broad. Level; fertile, and abounding with cattle.
- KOOTURDEA ISLANDS**,—Chittagong; lat. 21° 50', lon. 91° 55'. About 12 m. long. Low and woody.
- MUSCAL**,—Chittagong; lat. 21° 35', lon. 92°. 15 m. long, and 7 m. broad. Some small elevations.
- SHAPOREE**,—Arracan; lat. 20° 46', lon. 92° 24'.
- ST. MARTIN**,—Arracan; lat. 20° 36', lon. 92° 25'. Two divisions united by a dry ledge of rocks.
- BOLONGO**,—Arracan; lat. 20', lon. 93°. Mountainous, woody, and rugged.
- PENY KYOUNG**,—Arracan; lat. 20', lon. 93° 4'. 26 m. long; 6 m. broad. Mountainous, woody, and rugged.
- ANGEY KYOUNG**,—Arracan; lat. 19° 50', lon. 93° 10'. 20 m. long; 3 m. broad. Mountainous, woody, and rugged.
- RAMREE**,—Arracan; lat. 19° 5', lon. 93° 52'. About 50 m. long; extreme breadth, 20 m.
- CHEDUBA**,—Arracan; lat. 18° 40'—56', lon. 93° 31'—50'. About 20 m. long, and 17 broad; 250 sq. m. Hill and dale; some parts picturesque. Hills in the north part covered with jungle.
- FLAT**,—Arracan; lat. 18° 37', lon. 93° 50'. About 4 m. long. High towards the centre.
- NEGRAIS**,—Pegu; lat. 15° 58', lon. 94° 24'. Circumference, about 18 m.; area, 10 sq. m. Rendered conspicuous by a hill forming the E. high land on the coast.
- PELEW GEWEN**,—Mouth of Saluen river; lat. 16° 20', lon. 97° 37'.
- KALEGOUK**,—Tenasserim; lat. 15° 32', lon. 97° 43'. 6 m. long; 1 m. broad.
- MOSCOS ISLANDS**,—Tenasserim; lat. 13° 47'—14° 28', lon. 97° 53'. Safe channel between them and the coast.
- TAVOY**,—Tenasserim; lat. 12° 55'—13° 15', lon. 98° 23'. About 20 m. long, and 2 m. broad. Of moderate height,

- CABOSSA**,—Mergui Archipelago; lat. 12° 48', lon. 97° 58'. Moderately high.
- KING**,—Mergui Archipelago; lat. 12° 31', lon. 98° 28'. Length, 26 m.; breadth, 10 m.
- ELPHINSTONE**,—Mergui Archipelago; lat. 12° 21', lon. 98° 10'. 13 m. long;  $\frac{1}{2}$  m. broad.
- ROSS**,—Mergui Archipelago; lat. 12° 54', lon. 98° 12'.
- BENTINCK**,—Mergui Archipelago; lat. 11° 45', lon. 98° 9'. 20 m. long; 6 m. broad.
- DOMEL**,—Mergui Archipelago; lat. 11° 40', lon. 98° 20'. 26 m. long; 5 m. broad.
- KISSERANG**,—Mergui Archipelago; lat. 11° 34', lon. 98° 36'. 20 m. long; 10 m. broad.
- SULLIVAN'S**,—Mergui Archipelago; lat. 10° 50', lon. 98° 20'. 36 m. long, and 3 m. broad.
- CLARA**,—Mergui Archipelago; lat. 10° 54', lon. 98° 4'. High; having small peaks, one very sharp, like a sugar-loaf.
- Harbours and Havens on the Coast of India—Name, District, Position, Dimensions, Soundings, and Remarks.*
- KURRACHEE**,—Sinde; lat. 24° 51' N., lon. 67° 2' E. Spacious; about 5 m. N. from Munooria point, and about the same from town. Entrance,  $1\frac{1}{2}$  fath. at low-water; 3 ft. at spring-tides. W. side, from 2 to 4 fath. at low-water. Position of great importance: the only safe port in Sinde. Population, 22,227. Railway from port to navigable part of Indus.
- POORBUNDER**,—Kattywar; lat. 21° 37', lon. 69° 45'. Entrance obstructed by a bar. Much frequented by craft from 12 to 80 tons burthen; trading with Africa, Sinde, Beloochistan, Persian Gulf, and Malabar coast. Exp., grain and cotton. Imp., various kinds.
- NUVVE-BUNDER**,—Kattywar; lat. 21° 28', lon. 69° 54'. Available only for small craft. River Bhader, navigable for 18 m. above town.
- DIU**,—Kattywar (on an island); lat. 20° 42', lon. 71°. Good haven, 3 and 4 fath. Small harbour E. of Diu head, from 2 to  $3\frac{1}{2}$  fath. A Portuguese town, well fortified; little traffic.
- MOWA**,—Kattywar; lat. 21° 3', lon. 71° 43'. 7 to 10 fath. Anchorage without shelter from the S.; with the flood-tide a vessel must lie with a reef of rocks right astern; considerable traffic.
- GOGO**,—Kattywar; lat. 21° 39', lon. 72° 15'. Excellent anchorage; safe during S.W. monsoon; water always smooth. Ships touching here may procure water and refreshments, or repair damages.
- BHOWNUGGER**,—Kattywar; lat. 21° 45', lon. 72° 10'. Good and safe harbour. Place of extensive trade.
- BROACH**,—Bombay; lat. 21° 42', lon. 73° 2'. River (Nerbudda) 2 m. wide, but shallow; at flood-tide there is a deep but intricate channel. Navigable only for craft of 50 tons burthen at all times. Town walled.
- SURAT**,—Bombay; lat. 21° 10', lon. 72° 52'. A barred harbour. Roadstead dangerous in spring, when S. and W. winds prevail.
- DAMAUN**,—Bombay; lat. 20° 24', lon. 72° 53'. 2 ft. on bar at low-water; spring-tides, 18 or 20 ft. inside. Rise of tide, 17 or 18 ft. Outside bar, a roadstead 8 fath. Excellent place for small vessels during S.W. monsoon, and for repairs. Portuguese town fortified.
- BOMBAY**,—Concans; lat. 18° 57', lon. 72° 52'. Excellent and extensive haven. Continuous breakwater for nearly 10 m. Lighthouse, 150 ft. above sea, at S. extremity of Colaba Island. Great facilities for ship-building. Large docks, and strongly fortified.
- JINJEERA**, or **RAJAPPOOR**,—Concans; lat. 18° 18', lon. 73° 1'. 4 to 5 fath. at entrance, and same depth inside at low-water. No bar; shelter from all winds. Fortified.
- BANKOTE**,—Concans; lat. 17° 58', lon. 73° 8'. 5 fath. low-water. Small haven at the mouth of the Savitree. Fort Victoria, on a high barren hill, S. side of entrance.
- GHERIAH**, or **VIZIADROOG**,—Concans; lat. 16° 32', lon. 73° 22'. 5 to 7 fath. entrance, and 3 to 4 fath. inside at low-water. Excellent harbour; land-locked and sheltered from all winds. No bar.
- VINGORLA**,—Concans; lat. 15° 50', lon. 73° 41'. Small bay; sheltered from every point except the S. About 2 m. from the main-land are the Vingorla rocks, —dangerous.
- GOA**,—W. coast, S. India; lat. 15° 30', lon. 74°. Fine harbour, formed by an arm of the sea, into which flows a small river. Ancient Portuguese city, now falling into decay.
- SEDASHEVAGHUR**,—Malabar coast; lat. 14° 52', lon. 74° 12'. Entrance to river 25 ft. at high tide; hazardous and intricate. Anchorage outside in Carwar Bay, sheltered by several islets. Fortified.
- HONAHWAR**,—Malabar coast; lat. 14° 17', lon. 74° 30'. 7 m. long; 3 m. broad; 15 sq. m.; 5 or 6 fath. Though not a good haven, it can receive large ships.
- MOOLKY**,—Malabar coast; lat. 13° 6', lon. 74° 51'. Place of shelter for coasting and fishing craft. Mulki rocks outside.
- MANGALORE**,—Malabar coast; lat. 12° 52', lon. 74° 54'. Estuary, a fine expanse of water, separated from the sea by a beach of sand. The utility of the haven is greatly impaired, as the depth at the entrance is liable to vary.
- CANANORE**,—Malabar coast; lat. 11° 52', lon. 75° 26'. Small bay, open to the S., but sheltered on the W. 5 and  $5\frac{1}{2}$  fath. abreast of the fort. Water-shoals and rocky bottom near the fort.
- TELLICHERRY**,—Malabar coast; lat. 11° 45', lon. 75° 33'. Abreast of the fort is a ledge of rocks, between which and the land small craft may anchor. A shipping-place for produce of coast.
- MAHE**,—Malabar coast; lat. 11° 42', lon. 75° 36'. 5 or 6 fath. from  $1\frac{1}{2}$  to 3 m. from shore. Vessels of considerable burthen must anchor in the road. In fair weather, small craft can cross the bar of the river safely. A small French possession.
- CALICUT**,—Malabar coast; lat. 11° 15', lon. 75° 50'. 5 or 6 fath. from 2 to 3 m. from land. No river or haven. A capacious haven said to have existed formerly; now filled up by drifted sand.
- PONANY**,—Malabar coast; lat. 10° 48', lon. 75° 58'. 3 or 4 m. to sea is a shoal, but anchorage between it and land. 4 fath. on shoal, 6 fath. inside between it and shore. River navigable only for small craft. A railway from Madras is contemplated.
- COCHIN**,—Malabar coast; lat. 9° 58', lon. 76° 18'. Outside the mouth of the Backwater there is a bar with 14 or 15 ft., inside about 25 or 30 ft. Injurious affected by the S.W. monsoon.
- QUILON**,—Malabar coast; lat. 8° 53', lon. 76° 39'. A bight where ships may anchor, under shelter, at about  $2\frac{1}{2}$  or 3 m. from the fort. Formerly a place of note.
- TUTICORIN**,—Gulf of Manaar; lat. 8° 48', lon. 78° 12'. Safe roadstead; good anchorage, sheltered on all points. Pearl oyster banks exist in the vicinity.
- NAGORE**,—Coromandel coast; lat. 10° 49', lon. 79° 54'. 8 ft. on the bar at high-water. Several vessels of 200 or 300 tons burthen belong to this place.
- PORTO-NOVO**,—Coromandel coast; lat. 11° 31', lon. 79° 49'. Ships must anchor 2 m. off shore, in 6 or 7 fath. River small at its mouth; admits only coasting craft.
- CUDDALORE**,—Coromandel coast; lat. 11° 43', lon. 79° 50'. River small, and mouth closed up by a bar. Admits coasting craft; good anchorage off shore  $1\frac{1}{2}$  m.
- PONDICHERRY**,—Coromandel coast; lat. 11° 56', lon. 79° 54'. 7 or 8 fath., about  $\frac{3}{4}$  of a mile from land; 12 or 14 fath. in the outer road. Mouth of a small river, capable of admitting coasting craft. French possession; lighthouse, 89 ft.
- MADRAS**,—Coromandel coast; lat. 13° 5', lon. 80° 21'. Anchorage 2 m. from shore, 9, 10, or 11 fath.; 300 yards from beach, varying from 12 to 25 ft. Vessels obliged to anchor 2 m. from shore, exposed to a heavy swell rolling in from seaward. Surf at all times sufficient to dash to pieces any European boat. During the S.W. monsoon no communication with the shore can be held without great danger. Fort St. George, strong.

**NIZAMPATNAM**,—Coromandel coast; lat. 15° 55', lon. 80° 44'. No vessel of great burthen can approach the place. A considerable coasting trade.

**MASULIPATAM**,—Golconda coast; lat. 16° 10', lon. 81° 13'. Very shallow,  $\frac{1}{2}$  fath. for nearly a mile. Ships must anchor 4 or 5 m. from the land, and abreast of the town.

**CORINGA**,—Golconda coast; lat. 16° 49', lon. 82° 19'. Bar at entrance, with 12 or 14 ft. at spring-tides. Within, from 2½ to 4 fath. Best place on this coast for building or repairing small vessels.

**VIZAGAPATAM**,—Orissa coast; lat. 17° 41', lon. 83° 21'. Bar at entrance passable for vessels of from 150 to 200 tons burthen. 8 or 10 ft. on bar; anchorage off land, 8 fath. In the S.E. monsoon, ships anchor S. of the Dolphin's Nose; in the N.E. monsoon, from 1½ to 1¾ m. from land.

**JUGGURNATH, or POOREE**,—Orissa coast; lat. 19° 49', lon. 85° 53'. No harbour for town. Surf here very violent; landing can be effected only by boats similar to those used on the Coromandel coast.

**BALASORE**,—Orissa coast; lat. 21° 30', lon. 87°. 12 to 15 ft. on bar at spring-tides. Large ships cannot enter the river; they must lay in Balasore-roads, where they are in some degree sheltered. Dry docks, to which vessels may be floated during spring-tides.

**KEDJEREE**,—Bengal; lat. 21° 53', lon. 88°. 6 or 7 fath.; a bank has reduced the depth to 2 or 2½ fath. at low-water. Telegraphic communication with Calcutta, to announce arrivals and intelligence.

**DIAMOND HARBOUR**,—Bengal; lat. 22° 12', lon. 88° 10'.

So called as a part of Hooghly river. Formerly the resort of the large "Indiamen."

**CHITTAGONG**,—Bengal; lat. 22° 29', lon. 91° 54'. Formerly a place of considerable trade, but now declining; other ports having supplanted it.

**AKYAB**,—Arracan; lat. 20° 10', lon. 92° 54'. Good harbour. Suited for a commercial town.

**KHYOUK PHYOU**,—Arracan; lat. 19° 24', lon. 93° 34'. Harbour said to be one of the finest in the world. Safe ingress for largest-sized ships at any season of the year.

**GWA, or GOA**,—Arracan; lat. 17° 33', lon. 94° 41'. Barred. Harbour for vessels of 200 tons burthen.

**BASSEIN**,—Pegu; lat. 16° 45', lon. 94° 50'. Deep river channel affords a safe passage for large ships.

**RANGOON**,—Pegu; lat. 16° 46', lon. 96° 17'. Anchorage off the town in river. Rangoon river, a branch of the Irawaddy river.

**MOULMEIN**,—Tenasserim; lat. 16° 30', lon. 79° 42'. An excellent well-sheltered haven. Fine seaport town. Forests in the neighbourhood, with other advantages favourable for ship-building.

**AMHERST**,—Tenasserim; lat. 16° 4', lon. 97° 40'. Harbour large, difficult of access, and, during the S.W. monsoon, dangerous.

**TAVOY**,—Tenasserim; lat. 14° 7', lon. 98° 18'. Obstructed by shoals and banks. Inaccessible for large ships within some miles of the town.

**MERGUI**,—Tenasserim; lat. 12° 27', lon. 98° 42'. Harbour spacious, secure, and easy of access and egress for ships of any size. Town inaccessible for vessels of large burthen, as a bank obstructs the stream.

*Military Stations.*\*—1. Agra; 2. Ahmedabad; 3. Ahmednuggur; 4. Akyab; 5. Allahabad; 6. Allyghur; 7. Allypoo; 8. Almora; 9. Arcot; 10. Arnee; 11. Aseezghur; 12. Baitool; 13. Bareilly; 14. Barrackpore; 15. Bancoorah; 16. Bandah; 17. Bangalore; 18. Balmer; 19. Baroda; 20. Broach; 21. Beawr; 22. Benares; 23. Berhampore; 24. Bellary; 25. Belgaum; 26. Bhagulpore; 27. Bhooj; 28. Bhopawur; 29. Bhurtpore; 30. Bishnath; 31. Bombay; 32. Burdwan; 33. Buxar; 34. Cannanore; 35. Cawnpore; 36. Chicacole; 37. Chinsurah; 38. Chirra-poonjee; 39. Chittagong; 40. Chunar; 41. Cuddapah; 42. Cuttack; 43. Dacca; 44. Dapoollee; 45. Delhi; 46. Dehra; 47. Deesa; 48. Dharwar; 49. Dinapore; 50. Dindigul; 51. Dorunda; 52. Dumdum; 53. Durrungaun; 54. Etawah; 55. Frazerpett; 56. Ft. William; 57. Futtehghur; 58. Ghazepore; 59. Goruckpore; 60. Gowhatty; 61. Gurrawarra; 62. Gwalior; 63. Hansi; 64. Hawilbagh; 65. Hazareebagh; 66. Hoosungabad; 67. Hursule; 68. Hydrabad (Deccan); 69. Hydrabad (Sinde); 70. Kaira; 71. Khyou-phyou; 72. Kirkee; 73. Kulladjee; 74. Kurnaul; 75. Kurrachee; 76. Jounpore; 77. Jubbulpore; 78. Jumalpore; 79. Lahore; 80. Lohoooghaut; 81. Loodiana; 82. Lucknow; 83. Malligaum; 84. Mangalore; 85. Masulipatam; 86. Meerut; 87. Midnapore; 88. Mirzapore; 89. Mhow; 90. Moradabad; 91. Moorshedabad; 92. Mudduckray; 93. Mullye; 94. Mundlaiser; 95. Mynpooree; 96. Nagpore; 97. Neemuch; 98. Noagaum; 99. Nusseerabad; 100. Ootacamund; 101. Palamcottah; 102. Palavera; 103. Palgatcheri; 104. Peetoraghur; 105. Peshawur; 106. Poonah; 107. Poonamallee; 108. Prome; 109. Quilon; 110. Rangoon; 111. Rajkote; 112. Russell-Koondah; 113. Samulkotta; 114. Sattara; 115.

Saugor; 116. Seerolee; 117. Seetapoor; 118. Secunderabad; 119. Sulharunpore; 120. Seroor; 121. Shahjehanpore; 122. Sholapoor; 123. Silhet; 124. St. Thomas's Mt. (Ft. St. George); 125. Subathoo; 126. Sultanpore (Benares); 127. Sultanpore (Oude); 128. Surat; 129. Trichinopoly; 130. Vellore; 131. Vizianagram; 132. Vizagapatam; 133. Wallajahbad.

*Principal Native Cities.*—1. Ahmedabad; 2. Ajmere; 3. Amritsir; 4. Azimghur; 5. Bandah; 6. Banswarra; 7. Bareilly; 8. Baroda; 9. Beejapoor; 10. Beekaneer; 11. Benares; 12. Bhawalpore; 13. Bhooj; 14. Bhopal; 15. Boondee; 16. Burdwan; 17. Burranpore; 18. Calcutta; 19. Calpee; 20. Cuddapah; 21. Culna; 22. Cuttack; 23. Dacca; 24. Dholpore; 25. Dinajepore; 26. Dohud; 27. Dutteah; 28. Ellichpore; 29. Ellore; 30. Etawah; 31. Ferozabad; 32. Furruckabad; 33. Futtehpoor; 34. Fyzabad; 35. Garakota; 36. Gayah; 37. Goruckpore; 38. Guntore; 39. Gwalior; 40. Iiurdwar; 41. Hydrabad (Deccan); 42. Hydrabad (Sinde); 43. Indore; 44. Kashmir; 45. Khatmandoo; 46. Kolapoor; 47. Jamoo; 48. Jansi; 49. Jeypoor; 50. Joudpore; 51. Lahore; 52. Leia; 53. Lucknow; 54. Lukkur; 55. Madura; 56. Midnapore; 57. Mittunkote; 58. Moorshedabad; 59. Muttra; 60. Nagpore; 61. Oodeypore; 62. Patna; 63. Putteerala; 64. Rangoon; 65. Sattara; 66. Sikri; 67. Silhet; 68. Tanjore; 69. Trichinopoly.

*Principal Maritime Stations.*—1. Akyab; 2. Amherst; 3. Arracan; 4. Balasore; 5. Broach; 6. Bombay; 7. Calcutta; 8. Cambay; 9. Cannanore; 10. Cochin; 11. Coringa; 12. Dalhousie; 13. Diu; 14. Kedjeree; 15. Kurrachee; 16. Madras; 17. Mangalore; 18. Masulipatam; 19. Mergui; 20. Moulmein; 21. Poorbunder; 22. Quilon; 23. Ramoo; 24. Rangoon; 25. Surat; 26. Vizagapatam.

\* *Seats of Government.*—1. Agra; 2. Bombay; 3. Calcutta, or Fort William; 4. Hydrabad (Sinde); 5. Lahore; 6. Madras, or Fort St. George.

*Sanitaria.*—Aboo, (Mt.); Chunar; Darjeeling; Ootacamund; Landour; Simla; Mahabulishwar; Murree (on a spur of the Suttee hills in the Hazara district); Chumba (at the head of the Baree Dooab.)

## Statistical Return of Land Revenue, Area, and Population in

Division.	Districts.	Number of Mounzabs or townships.	Area in sq. British Statute miles of 640 acres each.	Area in Acres.	Malgoozaree or assessed land.		Minhaee or unassessed land.		Demand on act. of land revenue 1851-'52, in Rs.	Rate per acre on Total area.
					Cultivated Acres.	Culturable Acres.	Lakhiraj Acres.	Barren Acres.		
1	2	3	4	5	6	7	8	9	10	11
DELHI.	Panecput . . . . .	538	1,269.9	812,745	407,051	261,747	19,398	124,549	827,123	1 0 3
	Hissar . . . . .	653	3,294.2	2,108,279	988,923	864,099	85,528	169,729	465,760	0 3 6
	Delhi . . . . .	568	789.7	505,320	263,208	76,585	91,402	74,125	456,487	0 14 5
	Rohtuck . . . . .	300	1,340.4	857,885	641,792	147,183	22,730	46,180	631,132	0 11 9
	Goorgaon . . . . .	1,274	1,939.1	1,241,017	895,940	168,428	16,352	160,297	1,047,231	0 13 6
	Total . . . . .	3,333	8,633.3	5,525,246	3,196,914	1,518,042	235,410	574,880	3,427,736	0 9 11
MEERUT.	Saharanpoor . . . . .	1,904	2,162.3	1,383,898	774,253	211,449	54,597	343,599	1,064,513	0 12 4
	Moozuffernugger . . . . .	1,138	1,646.3	1,053,641	670,468	153,173	76,287	153,713	1,107,538	1 0 10
	Meerut . . . . .	1,638	2,200.1	1,408,063	907,758	236,021	82,028	182,256	1,693,046	1 3 3
	Boolundshahur . . . . .	1,576	1,823.6	1,167,094	715,587	143,260	88,036	220,211	1,056,835	0 14 6
	Allyghur . . . . .	1,997	2,153.4	1,378,204	961,076	77,725	41,079	298,333	1,985,136	1 7 1
	Total . . . . .	8,253	9,985.7	6,390,900	4,029,142	821,628	342,018	1,198,112	6,907,068	1 1 0
ROHTAK.	Bijnore . . . . .	3,030	1,900.0	1,216,005	590,622	175,553	42,626	407,204	1,197,695	0 13 9
	Moradabad . . . . .	3,484	2,698.8	1,727,216	839,919	308,851	256,086	322,360	1,340,312	0 12 5
	Budaon . . . . .	2,232	2,401.9	1,537,191	928,299	286,055	69,734	253,103	1,097,329	0 11 5
	Bareilly . . . . .	3,563	3,119.1	1,996,224	1,056,961	394,810	83,630	460,823	1,769,610	0 14 2
	Shahjehanpoor . . . . .	2,785	2,308.4	1,477,359	716,201	453,032	33,067	275,059	1,060,318	0 11 9
	Total . . . . .	15,094	12,428.2	7,953,995	4,132,002	1,618,301	485,143	1,718,549	6,465,264	0 13 0
AGRA.	Muttra . . . . .	1,019	1,613.4	1,032,542	733,362	87,224	97,649	114,307	1,657,283	1 9 9
	Agra . . . . .	1,143	1,864.9	1,193,537	747,536	118,104	84,460	243,437	1,622,980	1 5 9
	Furruckabad . . . . .	2,017	2,122.9	1,358,685	749,023	178,345	69,985	361,332	1,333,011	0 15 8
	Mynpoory . . . . .	1,344	2,020.2	1,292,946	687,098	114,526	8,510	482,812	1,267,079	0 15 8
	Etawah . . . . .	1,495	1,677.0	1,073,276	557,804	59,927	29,143	426,402	1,272,086	1 3 0
	Total . . . . .	7,018	9,298.4	5,950,986	3,474,823	558,126	289,747	1,628,290	7,152,439	1 3 3
ALLAHABAD.	Cawnpoor . . . . .	2,257	2,348.0	1,502,699	800,438	149,232	61,992	491,037	2,144,075	1 6 10
	Futtehpoor . . . . .	1,617	1,583.1	1,013,171	509,793	131,895	9,417	362,066	1,426,205	1 6 6
	Humeerpoor . . . . .	997	2,241.6	1,434,651	770,254	316,504	14,531	333,362	1,277,864	0 14 3
	Banda . . . . .	1,257	3,009.6	1,926,112	846,831	561,281	82,934	435,066	1,591,377	0 13 3
	Allahabad . . . . .	4,003	2,788.7	1,784,780	971,558	247,255	28,240	537,727	2,141,221	1 3 2
	Total . . . . .	10,131	11,971.0	7,661,413	3,898,874	1,406,167	197,114	2,159,258	8,580,742	1 1 11
BENARES.	Goruckpoor . . . . .	15,714	7,340.2	4,697,706	2,232,901	1,268,024	160,732	1,036,049	2,133,931	0 7 3
	Azimgurh . . . . .	6,270	2,516.4	1,610,498	798,707	213,729	41,027	557,035	1,489,619	0 14 10
	Jounpoor . . . . .	3,431	1,552.2	993,383	573,616	58,121	23,497	338,149	1,254,095	1 4 2
	Mirzapoor . . . . .	5,280	5,152.3	3,297,472	768,296	293,394	1,421,412	814,370	839,732	0 4 1
	Benares . . . . .	2,296	995.5	637,107	420,069	35,791	29,571	151,676	903,358	1 6 8
	Ghazeepoor . . . . .	5,088	2,181.0	1,395,808	924,884	151,168	41,532	278,224	1,500,426	1 1 2
Total . . . . .	38,079	19,737.6	12,631,974	5,718,473	2,020,227	1,717,771	3,175,503	8,121,161	0 10 3	
Grand Total . . . . .	81,908	72,054.2	46,114,514	24,450,228	7,942,491	3,267,293	10,454,592	40,654,410	0 14 1	

Non-Regulation Districts, from Census of 1847-'48, the latest date.

Divisions.	Districts.	Area in Sq. Miles.	Population.	No. to each Sq. Mile.
Saugor and Nerbudda Territories	Saugor . . . . .	1,857	305,594	165
	Dumoh . . . . .	2,428	363,584	149
	Jubbulpore . . . . .	6,237	442,771	71
	Seonee . . . . .	1,459	227,070	156
	Mundla . . . . .	6,170	225,092	36
	Hoshungabad . . . . .	1,916	242,641	127
	Baitool . . . . .	990	93,441	94
	Nursingpore . . . . .	501	254,486	508
	Jaloun . . . . .	2,313	246,297	106
	Jhansi . . . . .	1,394	300,000	215
	Chundeyree . . . . .	556	87,260	157
	Jawud Neemuch . . . . .	Jawud Neemuch . . . . .	443	84,866
Nimar . . . . .	Nimar, British . . . . .	269	25,727	96
Ajmere . . . . .	Ajmere, including all Mairwarra . . . . .	2,891	287,290	99
Kumaon . . . . .	Kumaon—Gurwhal . . . . .	11,972	605,830	50
Total, Non-Regulation Districts . . . . .		41,396	3,791,949	91



the Districts of the North Western Provinces, prepared in 1852-'53.

Table with 14 columns: Rate per acre on Total Malguzara-ree., Rate per acre on Total Cultiva-tion., and columns 12-24 for population statistics (Hindoos, Mohammedan and others not Hindoo, Total, No. of persons to each sq. British Statute mile of 640 acres each, Number of acres to each person).

Bombay—Population.

Table with 11 columns: Districts., Hindoos., Wild Tribes., Low Castes., Shraw-niks., Lingayets, Mussul-mans., Parsees., Jews., Chris-tians., Grand Total.

Population of the Territories of the Madras Presidency, according to the Census taken in the Revenue Year 1850-51.

Districts.	Adults.				Children				Grand Total.			Area in Square Miles.	No. of Persons to each Square Mile.
	Males.		Females.		Males.		Females.		Males.	Females.	Total.		
	Hindoos.	Mahomedans and others.	Hindoos.	Mahomedans and others.	Hindoos.	Mahomedans and others.	Hindoos.	Mahomedans and others.					
1. Ganjam . . . . .	282,650	1,616	295,110	1,984	190,334	845	153,738	653	475,415	451,485	926,930	6,400	145
2. Vizagapatam . . . . .	397,463	4,815	411,715	5,425	240,019	3,026	189,393	2,416	645,323	608,949	1,254,272	7,650	164
3. Rajahmundry . . . . .	322,316	6,726	339,613	7,471	181,872	3,789	147,409	3,140	514,703	497,333	1,012,036	6,050	167
4. Masulipatam . . . . .	176,167	7,323	166,497	7,659	91,049	4,665	64,983	3,443	279,204	241,662	520,866	5,000	104
5. Guntoor . . . . .	168,461	10,578	168,061	10,586	93,893	7,531	94,927	6,631	290,463	279,505	569,968	4,900	115
6. Nellore . . . . .	312,213	14,060	294,920	12,946	151,425	7,720	133,476	6,390	485,418	450,272	935,690	7,950	118
7. Bellary . . . . .	394,108	28,404	374,459	28,619	202,446	17,413	168,203	14,947	645,371	586,228	1,229,599	13,056	94
8. Cuddapah . . . . .	147,959	29,762	139,283	28,773	261,011	20,389	216,351	17,193	759,121	692,800	1,451,921	12,970	112
9. Chingleput . . . . .	191,239	6,144	183,947	5,928	102,649	3,673	86,740	3,142	303,705	279,547	583,462	3,020	193
10. North Arcot . . . . .	465,620	6,144	450,896	24,159	261,000	13,674	236,262	11,841	723,148	723,148	1,446,296	6,800	218
11. South Arcot . . . . .	339,431	13,637	327,508	12,742	152,293	6,726	127,766	5,092	532,087	473,918	1,006,005	7,610	192
12. Salem . . . . .	389,945	9,965	383,418	9,962	212,700	6,262	187,013	5,102	609,872	585,495	1,195,367	8,200	146
13. Tanjore . . . . .	523,970	44,036	512,731	50,407	249,934	23,180	221,556	20,272	811,120	834,966	1,646,086	3,900	430
14. Trichinopoly . . . . .	184,741	57,390	188,027	57,418	88,423	29,769	76,861	26,565	360,325	348,871	709,196	3,000	236
15. Madura . . . . .	532,714	53,705	552,737	56,304	268,998	28,206	239,982	24,645	883,123	873,668	1,756,791	10,700	164
16. Tinnevely . . . . .	361,916	39,785	381,630	45,001	207,188	27,804	176,884	22,978	636,723	632,493	1,269,216	5,700	223
17. Coimbatore . . . . .	357,473	8,207	381,239	8,637	206,504	4,944	182,698	4,160	577,128	576,734	1,153,862	8,280	139
18. Canara . . . . .	314,921	34,775	315,383	34,856	171,715	21,358	145,063	18,262	512,769	513,504	1,026,273	7,720	137
19. Malabar . . . . .	358,361	125,432	371,933	128,683	200,823	79,316	181,095	69,296	763,932	750,977	1,514,909	6,000	250
20. Kurnool . . . . .	74,525	14,019	73,679	14,674	43,037	8,948	36,841	7,467	140,529	132,661	273,190	3,243	84
Total . . . . .	6,606,723	533,740	6,639,786	551,914	3,587,375	319,238	3,067,841	274,955	11,017,076	10,534,496	21,551,572	138,249	156
21. Madras . . . . .	—	—	—	—	—	—	—	—	—	—	700,000	30	23,333
Grand Total . . . . .	6,606,723	533,740	6,639,786	551,914	3,587,375	319,238	3,067,841	274,955	11,047,076	10,534,496	22,281,572	138,279	161

Population of Calcutta in May, 1850, exclusive of Suburbs.

Class.	Males by Ages.			Females by Ages.			Grand Total.
	Under 4 yrs. of age.	Above 20, under 40.	Total.	Under 5 yrs. of age.	Above 20, under 40.	Total.	
	Europeans . . . . .	600	1,473	3,791	503	817	
Eurians . . . . .	417	770	2,449	348	766	779	2,166
Armenians . . . . .	174	155	499	131	118	113	393
Chinese . . . . .	50	421	699	40	46	43	148
Asiates . . . . .	1,999	1,746	7,970	1,226	1,529	2,436	7,372
Hindoo . . . . .	18,297	70,770	165,659	14,897	30,437	41,038	108,676
Mahomedans . . . . .	7,544	32,750	72,332	6,214	10,536	14,763	27,435
Total . . . . .	28,587	169,257	259,399	23,346	44,262	59,681	159,883

BRITISH TERRITORIES UNDER THE BENGAL PRESIDENCY. 517

Districts.	Area, Square Miles.	Population.	Districts.	Area, Square Miles.	Population.
<b>BENGAL.</b>			Seonee . . . . .	1,459	227,070
<i>Jessore</i> —			Dumoh . . . . .	2,428	363,584
Jessore . . . . .	3,512	381,744	Nursingpore . . . . .	501	254,486
24 Pergunnahs . . . . .	1,186	288,000	Baitool . . . . .	990	93,441
Burdwan . . . . .	2,224	1,854,152	British Mahairwarrah . . . . .	282	37,715
Hoogly . . . . .	2,089	1,520,840		15,670	1,967,302
Nuddea . . . . .	2,942	298,736	<i>Cis-Sutlej</i> —		
Bancoorah . . . . .	1,476	480,000	Umbaliah . . . . .	293	67,134
Baraset . . . . .	1,424	522,000	Loodianah, includ. Wudni . . . . .	725	120,898
	14,853	5,345,472	Kythul and Ladwa . . . . .	1,538	164,805
<i>Bhaugulpore</i> —			Ferozepore . . . . .	97	16,890
Bhaugulpore . . . . .	5,806	2,000,000			369,727
Dinajpore . . . . .	3,820	1,200,000	Territory lately belong- ing to Seik chiefs. } . . . . .	1,906	249,686
Monghyr . . . . .	2,558	800,000		4,559	
Poorneah . . . . .	5,878	1,600,000	<i>North-East Frontier (As- sam)</i> —		
Tirhoot . . . . .	7,402	2,400,000	Cossya Hills . . . . .	729	10,935
Maldah . . . . .	1,000	431,000	Cachar . . . . .	4,000	60,000
	26,464	8,431,000		4,729	
<i>Cuttack</i> —			Camroop, Lower . . . . .	2,788	300,000
Cuttack with Pooree :—			Nowgong, do. . . . .	4,160	70,000
Cuttack . . . . .	3,061		Durrung, do. . . . .	2,000	80,000
Pooree . . . . .	1,768	1,000,000	Joorhat (Seeb- poor) Upper . . . . .	2,965	200,000
Balasure . . . . .	1,876	556,395	Lucikmpoor, do. . . . .	2,950	30,000
Midnapore and Hidgellecc . . . . .	5,029	666,328	Sudiya, including Mutruck . . . . .	6,942	30,000
Koordah . . . . .	936	571,160			21,805
	12,664	2,793,883	Goalpara . . . . .	3,506	780,935
<i>Moorshedabad</i> —			Arracan . . . . .	15,104	400,000
Moorshedabad . . . . .	1,856	1,045,000	Tenasserim, Tavoy, Ye, . . . . .	29,168	115,431
Bagoorah . . . . .	2,160	900,000	Pegu . . . . .	no	returns.
Rungpore . . . . .	4,130	2,559,000	<i>South-West Frontier</i> —		
Rajshahye . . . . .	2,084	671,000	Sumbulpore . . . . .	4,693	800,000
Pubna . . . . .	2,606	600,000	Ramgurh or Hazareebah . . . . .	8,524	372,216
Beerbhoom . . . . .	4,730	1,040,876	Lohur-{Chota Nagpore } dugga (and Palamow ) . . . . .	5,308 } 3,468 }	482,900
	17,566	6,815,876	Singbhoom . . . . .	2,944	200,000
<i>Dacca</i> —			Maunbhoom { Pachete . . . . . Barabhoom } . . . . .	4,792 } 860 }	772,340
Dacca . . . . .	1,960	600,000		30,589	2,627,456
Furreedpore, Dacca Je- lalpore . . . . .	2,052	855,000	<i>The Punjab, inclusive of the Julundur Doab and Koolo territory</i> —		
Mymensing . . . . .	4,712	1,487,000	Lahore . . . . .		
Sylhet, including Jyntea . . . . .	8,424	380,000	Jhelum . . . . .		
Bakergunge, including Deccan Shabazpore. } . . . . .	3,794	733,800	Mooltan . . . . .		
	20,942	4,055,800	Leia . . . . .	78,447	4,100,983
<i>Patna</i> —			Peshawur . . . . .		
Shahabad . . . . .	3,721	1,600,000	Huzara and Kohat . . . . .		
Patna . . . . .	1,828	1,200,000	The Sunderbunds— Mouths of Ganges. . . . .	6,500	unknown.
Behar . . . . .	5,694	2,500,000			
Sarun, with Chumparan . . . . .	2,560	1,700,000	Total, Bengal . . . . .	325,652	47,958,320
	13,803	7,000,000	<b>NORTH WEST. PROV.</b>		
<i>Chittagong</i> —			<i>Delhi</i> —		
Chittagong . . . . .	2,560	1,000,000	Paneeput . . . . .	1,279	283,420
Tipperah and Bulloah } . . . . .	4,850	{ 806,950 600,000			
	7,410	2,406,950			
<i>Saugor and Nerbudda</i> —					
Jaloun and the Pergun- nahs ceded by Jhansie } . . . . .	1,873	176,297			
Saugor . . . . .	1,857	305,594			
Jubbulpore . . . . .	6,237	442,771			
Hoshungabad . . . . .	1,916	242,641			

518 NORTH WEST PROVINCES—MADRAS, BOMBAY, AND SINDE.

Districts.	Area, Square Miles.	Population.	Districts.	Area, Square Miles.	Population.
Hurreeanah . . . . .	3,300	225,086			
Delhi . . . . .	602	306,550			
Rhotuck . . . . .	1,340	294,119			
Goargaon . . . . .	1,942	460,326			
	8,463	1,569,501			
<i>Meerut—</i>					
Saharur,poor . . . . .	2,165	547,353			
Mozuffernuggur . . . . .	1,617	537,594			
Meerut . . . . .	2,332	860,736			
Boolundshuhur . . . . .	1,855	699,393			
Allygurh . . . . .	2,149	739,356			
	10,118	3,384,432			
<i>Rohilcund—</i>					
Bijnour . . . . .	1,904	620,546			
Moradabad . . . . .	2,967	997,362			
Budaon . . . . .	2,368	825,712			
Bareilly and Pillibheet . . . . .	2,937	1,143,657			
Shajehanpore . . . . .	2,483	812,588			
	12,659	4,399,865			
<i>Agra—</i>					
Muttra . . . . .	1,607	701,688			
Agra . . . . .	1,860	828,220			
Furruckabad . . . . .	1,909	854,799			
Mynpoorie . . . . .	2,009	639,809			
Etawah . . . . .	1,674	481,224			
	9,059	3,505,740			
<i>Allahabad—</i>					
Cawnpore . . . . .	2,337	993,031			
Futtehpore . . . . .	1,583	511,132			
Humeerpore and Calpee . . . . .	2,240	452,091			
Banda . . . . .	2,878	552,526			
Allahabad . . . . .	2,801	710,263			
	11,839	3,219,043			
<i>Benares—</i>					
Goruckpore . . . . .	7,346	2,376,533			
Azimghur . . . . .	2,520	1,313,950			
Jounpore . . . . .	1,552	798,503			
Mirzapore . . . . .	5,255	831,388			
Benares . . . . .	994	741,426			
Ghazepore . . . . .	2,187	1,059,287			
	19,834	7,121,087			
The Butty Territory, in- } cluding Wuttoo. } . . . . .	3,017	112,274			
Pergunnah of Kote Kasim } Jaunsar and Bawur . . . . .	70	13,767			
Jaunsar and Bawur . . . . .	579	24,684			
Deyrah Dhoon . . . . .	673	32,083			
Kumaon (including Ghur- } wal . . . . .	6,962	166,755			
Awmeer . . . . .	2,029	224,891			
British Nimaur . . . . .	269	25,727			
	13,599	600,181			
Total, N. W. Provinces	85,571	23,800,549			
			<b>MADRAS.</b>		
			Rajahmundry . . . . .	6,050	1,012,036
			Masulipatam . . . . .	5,000	520,860
			Guntoor, including Palnaud	4,960	570,089
			Nellore . . . . .	7,930	935,690
			Chingleput . . . . .	2,993	583,462
			Madras, included in Chin- } gleput. }	—	720,000
			Arcot, South Division, in- } cluding Cuddalore. }	7,600	1,006,005
			Arcot, North Division, in- } cluding Consooddy. }	5,790	1,485,873
			Bellary . . . . .	13,056	1,229,599
			Cuddapah . . . . .	12,970	1,451,921
			Salem, including Vomun- } door and Mullapandy. }	8,200	1,195,377
			Coimbatore . . . . .	8,280	1,153,862
			Trichinopoly . . . . .	3,243	709,196
			Tanjore, including Najore	3,900	1,676,086
			Madura, including Dindigul	9,535	1,756,791
			Tinnivelly . . . . .	5,700	1,269,216
			Malabar . . . . .	6,060	1,514,909
			Canara . . . . .	7,720	1,056,333
				118,987	19,847,305
			Gangam . . . . .	6,400	926,930
			Vizagapatam . . . . .	7,650	1,254,272
			Kurnool . . . . .	2,643	273,190
			Total, Madra . . . . .	135,680	22,301,697
			<b>BOMBAY.</b>		
			Surat . . . . .	1,629	492,684
			Broach . . . . .	1,319	290,984
			Ahmedabad . . . . .	4,356	650,223
			Kaira . . . . .	1,869	580,631
			Kandeish . . . . .	9,311	778,112
			Tannah . . . . .	5,477	815,849
			Poonah . . . . .	5,298	666,006
			Ahmednuggur, including } Nassick Sub-collector- } ate. }	9,931	995,585
			Sholapore . . . . .	4,991	675,115
			Belgaum . . . . .	5,405	1,025,882
			Dharwar . . . . .	3,837	754,385
			Rutnagherry . . . . .	3,964	665,238
			Bombay Island, including } Colaba Island. }	18	566,119
			Sattara . . . . .	10,222	1,005,771
			Colaba . . . . .	318	58,721
			Sinde { Shikapore . . . . .	6,120	350,401
			{ Hyderabad . . . . .	30,000	551,811
			{ Kurrachee . . . . .	16,000	185,550
			Total, Bombay . . . . .	120,065	11,109,967
			Total, Madras and Bombay	255,745	33,410,764

The foregoing districts are under the sole control of the British government; the succeeding tables exhibit the locality, area, population, revenue, subsidy or tribute paid by, and military resources of, each of the protected and subsidiary native states; several of these, however—Mysore, for instance—are entirely under our government, although the administration is carried on in the name of the legitimate sovereign.

TABULAR VIEW OF THE TRIBUTARY AND PROTECTED STATES. 519

*Native States, not under direct Rule, but within the limits of Political Supremacy.<sup>1</sup>*

Name.	Locality.	Area, insquare miles.	Popula- tion.	Revenue.	Annual Subsidy, Tribute, or other payment.	Military Resources. <sup>2</sup>		
						Artil- lery.	Cavalry.	Infan- try.
BENGAL.								
Allee Mohun or Rajpooor Ali	Cent. In. (Malwa)	708	69,384	Rupees. 35,000	Rupees. 12,000	—	30	100
Amjherra . . . . .	Do.	584	57,232	100,000	35,000	—	400	600
Bahadoorgurh . . . . .	N.W. Prov. (adja- cent to Delhi dist.	48	14,400	130,000	—	—	70	80
Berar ( <i>vide</i> Nagpooor).	Cis-Sutlej	20,003	600,600	1,400,000	—	—	3,127	10,048
Bhawlpore . . . . .	Cent. In. (Malwa)	6,764	663,856	2,200,000	—	117	442	2,457
Bhopal <sup>3</sup> . . . . .	Cent. In. (adjacent to city of Agra)	1,978	600,000	1,700,000	—	200	1,500	3,700
Bhurtpore . . . . .								
Boria ( <i>vide</i> Jabooa).								
Bullbugurh . . . . .	N.W. Prov. (adja- cent to Delhi dist.	190	57,000	160,000	—	—	100	350
Bundleecund—								
” Adjyghur . . . . .	C. In. (Bundleecund)	34	45,000	325,000	7,750	18	200	1,200
” Allypooor . . . . .	Ditto . . . . .	85	9,000	45,000	—	—	—	75
” Banda . . . . .	Ditto . . . . .	—	—	—	—	69	167	207
” Behree . . . . .	Ditto . . . . .	30	2,500	23,000	—	2	25	100
” Behut . . . . .	Ditto . . . . .	15	2,500	15,500	—	1	10	50
” Berounda . . . . .	Ditto . . . . .	275	24,000	45,000	—	1	40	200
” Baonee . . . . .	Ditto . . . . .	127	18,800	100,000	—	—	50	300
” Bhysonda . . . . .	Ditto . . . . .	8	2,000	9,000	—	—	11	125
” Bijawur . . . . .	Ditto . . . . .	920	90,000	225,000	—	4	100	1,300
” Bijna . . . . .	Ditto . . . . .	27	2,800	8,000	—	2	15	125
” Chirkaree . . . . .	Ditto . . . . .	880	81,000	460,830	9,484	30	300	1,000
” Chutterpore . . . . .	Ditto . . . . .	1,240	120,000	300,000	—	10	100	1,000
” Dutteah . . . . .	Ditto . . . . .	850	120,000	1,000,000	—	80	1,000	5,000
” Doorwae . . . . .	Ditto . . . . .	18	3,000	15,000	—	—	8	230
” Gurowlee . . . . .	Ditto . . . . .	50	5,000	14,000	—	4	35	257
” Gorihar . . . . .	Ditto . . . . .	76	7,500	55,000	—	3	50	225
” Jignee . . . . .	Ditto . . . . .	27	2,800	15,000	—	1	19	51
” Jusso . . . . .	Ditto . . . . .	180	24,000	13,000	—	1	8	60
” Jhansi . . . . .	Ditto . . . . .	2,532	200,000	611,980	74,000	40	200	3,000
” Kampta . . . . .	Ditto . . . . .	1	300	1,500	—	—	—	—
” Logasce . . . . .	Ditto . . . . .	29	3,500	12,680	—	—	14	40
” Mukree . . . . .	Ditto . . . . .	10	1,600	5,000	—	—	—	—
” Nowagaon or Nygowan	Ditto . . . . .	16	1,800	9,100	—	4	12	100
” Nyagaon . . . . .	Ditto . . . . .	30	5,000	10,500	—	—	7	100
” Oorcha or Tehree	Ditto . . . . .	2,160	192,000	701,000	—	100	527	7,283
” Punna . . . . .	Ditto . . . . .	688	67,500	400,000	10,000	18	250	3,000
” Paharee or Puharee	Ditto . . . . .	4	800	800	—	—	—	50
” Puhrah . . . . .	Ditto . . . . .	10	1,600	8,000	—	—	4	99
” Paldeo . . . . .	Ditto . . . . .	28	3,500	21,000	—	—	10	50
” Poorwa . . . . .	Ditto . . . . .	12	1,800	9,500	—	—	5	40
” Sumphur . . . . .	Ditto . . . . .	175	28,000	450,000	—	45	300	4,000
” Surehlah . . . . .	Ditto . . . . .	35	4,500	45,000	—	—	25	75
” Tohree Futtepore	Ditto . . . . .	36	6,000	36,830	2,650	12	20	251
” Taraon or Turaon	Ditto . . . . .	12	2,000	10,000	—	3	5	40
Burwance . . . . .	Cent. In. (Malwa)	1,380	13,800	30,000	—	—	25	50
Cashnere (Gholab Sing's Dominions)	Punjab . . . . .	25,123	750,000	—	—	1,200	1,972	20,418
Cooch Behar . . . . .	N.E. frontier, Ben- gal . . . . .	1,364	136,400	132,000	66,000	—	342	108
Cossya and Garrow Hills—								
The Garrows . . . . .		2,268						
Ram Rye . . . . .		328						
Nastung . . . . .		360						
Muriow . . . . .		283						
Molyong . . . . .	Ditto	110	65,205	—	—	—	—	2,282
Mahram . . . . .		162						
Osimla . . . . .		350						
Kyrim, and other petty Chiefs . . . . .		486						

Notes.—<sup>1</sup> Some of these states are protected and tributary, others protected but not tributary; several, under subsidiary alliances, are bound to maintain a body of troops in readiness, when required, to co-operate with the British army; a few small states are protected by England, but tributary to larger states. Nepal is not protected, tributary, or subsidiary, but the rajah is bound by treaty to abide in certain cases by the decision of the British government, and, like all the other rulers, prohibited from retaining in his service subjects of any European or American state.

<sup>2</sup> In some states the troops are officered by Europeans from the British army; in many there are police corps and irregular feudal forces—corresponding in some measure to our militia. In several instances there is a road police, and an organized corps for the collection of the revenue.

<sup>3</sup> Under the treaty of 1818 the Nabob was to furnish a contingent force of 600 cavalry and 400 infantry; but in 1824 the numbers were reduced to 259 cavalry, 522 infantry, and 48 artillery, and placed under European command. The contingent is exclusive of the Nabob's troops. There is also a feudal force, consisting of 30 artillery, 200 cavalry, and 1,000 infantry.—[*Statistical Papers relating to India, laid before Parliament, 1853.*]

520 TABULAR VIEW OF THE TRIBUTARY AND PROTECTED STATES.

Name.	Locality.	Area, in square miles.	Popula- tion.	Revenue.	Annual Subsidy, Tribute, or other payment.	Military Resources.		
						Arti- lery.	Cavalry.	Infan- try.
<b>BENGAL—continued</b>								
Cuttack Mehals—				Rupees.	Rupees.			
" Angool . . . . .	. . . . .	—	—	—	1,550	—	5,000	
" Autgur . . . . .	. . . . .	—	—	—	6,748	—	1,500	
" Banky . . . . .	. . . . .	—	—	—	4,162	—	1,500	
" Berumbah . . . . .	. . . . .	—	—	—	1,310	—	1,500	
" Dhenkanaul . . . . .	. . . . .	—	—	—	4,780	—	7,000	
" Hindole . . . . .	. . . . .	—	—	—	516	—	250	
" Kundiapurra . . . . .	. . . . .	7,695	346,275	—	3,948	—	2,000	
" Neelgur . . . . .	. . . . .	—	—	—	3,617	—	500	
" Nursingporc . . . . .	Cuttack, in the	—	—	—	1,364	—	1,500	
" Nyaghur . . . . .	prov. of Orissa.	—	—	—	5,179	—	7,000	
" Runpoor . . . . .	. . . . .	—	—	—	1,313	—	1,500	
" Talehur . . . . .	. . . . .	—	—	—	974	—	500	
" Tiggreh . . . . .	. . . . .	—	—	—	826	—	300	
" Autmallik . . . . .	. . . . .	648	29,160	—	450	—	500	
" Boad . . . . .	. . . . .	1,377	61,965	—	750	—	2,000	
" Duspulla . . . . .	. . . . .	162	7,290	—	620	—	500	
" Koonjerry . . . . .	. . . . .	5,022	225,990	—	2,790	—	15,000	
" Monaurbunge . . . . .	. . . . .	2,025	91,125	—	1,001	—	8,000	
Deojana . . . . .	North-West Provs. (near Delhi dist.)	71	6,390	—	—	—	50	150
Dewas . . . . .	Cent. In. (Malwa)	256	25,088	400,400	—	—	175	500
Dhar . . . . .	Do.	1,070	104,860	475,000	—	47	254	798
Dholpore . . . . .	Hindustan (banks of Chumbul).	1,626	550,000	700,000	—	40	177	1,600
Furruckabad . . . . .	North-West Provs. (Lower Doab).	—	—	—	—	2	106	294
Furrucknuggur . . . . .	North-West Provs. (adjacent to Delhi).	22	4,400	—	—	—	—	25
Gholab Sing's Dominions, <i>vide</i> Cashmere.								
Gwalior (Scindia's Pos.) <sup>1</sup>	Central India	33,119	3,223,512	6,000,000	1,800,000	314	6,548	2,760
Hill States—								
Cis-Sutlej—								
Bhagul . . . . .	Northern In. (Cis- Sutlej)	100	40,000	50,000	3,600	—	3,000	
Bujee or Beejee . . . . .	Ditto	70	25,000	30,000	1,440	—	1,000	
Bejah . . . . .	Ditto	5	3,000	4,000	180	—	200	
Bulsun . . . . .	Ditto	64	5,000	6,000	1,080	—	500	
Bussahir . . . . .	Ditto	3,000	150,000	150,000	15,000	—	—	300
Dhamic . . . . .	Ditto	25	3,000	3,500	720	—	100	
Dhoorcatty . . . . .	Ditto	5	200	400	—	—	—	
Ghurwal . . . . .	Ditto	4,500	100,000	100,000	—	—	—	
Hindoor or Nalagarh . . . . .	Ditto	233	20,000	80,000	—	—	—	300
Joobul . . . . .	Ditto	330	15,000	14,130	2,520	—	—	
Kothar . . . . .	Ditto	12	4,000	7,000	1,080	—	400	
Koonyhar . . . . .	Ditto	12	2,500	3,500	180	—	—	200
Keonthul . . . . .	Ditto	272	26,000	33,500	—	—	2,690	
Koomharsin . . . . .	Ditto	56	12,000	10,000	1,440	—	1,000	
Kuhloor . . . . .	Ditto	150	32,250	110,000	—	—	—	400
Mangul . . . . .	Ditto	15	1,000	1,000	72	—	50	
Muhlog . . . . .	Ditto	50	13,000	10,000	1,440	—	500	
Mance Majrah . . . . .	Ditto	80	16,720	60,000	—	—	—	
Sirmoor or Nahuu . . . . .	Ditto	1,075	62,350	100,000	—	—	—	400
Hill States—								
Trans-Sutlej—								
Mundi . . . . .	Jullunder Doab .	759	113,091	350,000	—	—	—	500
Sookeit . . . . .	Ditto . . . . .	174	25,926	80,000	—	—	—	300
Holecar's Pos., ( <i>vide</i> Indore).								
Hyderabad (Nizam's do- minions) <sup>2</sup>	Hindustan . . . . .	95,337	10,666,030	15,500,000	3,500,000 <sup>3</sup>	—	4,521	12,369
Indore (Holecar's Pos.)	Cent. Ind. (Malwa)	8,318	815,164	2217,210	—	642	3,145	3,821 <sup>4</sup>

Notes.—<sup>1</sup> The revenues of Gwalior amount to 60 lacs of rupees per annum, exclusive of the districts assigned for the payment of the contingent force (18 lacs of rupees). The contingent consists of 8,401 men, commanded by British officers. The military force of the Maharajah, exclusive of the contingent, is not to exceed 9,600 men.

<sup>2</sup> In addition to these troops the Nizam maintains an irregular force, composed of Arabs, Sikhs, Turks, &c., amounting to 9,811 men. The State is also entitled to the services of 4,749 armed retainers, maintained by the Feudal Chiefs from revenues assigned by the Government for their support. The total military force of Hyderabad comprises five separate bodies, viz. :—1. British Subsidiary Force, 10,628. 2. Nizam's Auxiliary Force, 8,094. 3. Nizam's Irregulars, 16,890. 4. Force of Feudal Chiefs, 4,749. 5. Miscellaneous Force of Arabs, Sikhs, Turks, &c., 9,811. Total, 50,172. Under the Treaty of 1800, the Nizam's Contingent was to consist of 6,000 infantry and 9,000 cavalry; but the *Auxiliary Force*, organized under British officers, and paid by the Nizam, has been substituted for the Contingent, and consists of 8,094 cavalry, infantry, and artillery. The British subsidiary force amounts to 10,628 artillery, cavalry, and infantry.

<sup>3</sup> The cost of the Nizam's Auxiliary Force.

<sup>4</sup> This force is inclusive of the contingent of cavalry, which Holecar is bound to furnish. This prince contributes 11,000 rupees per annum towards the maintenance of the Malwa Bheelcorps, and also a further sum in aid of the United Malwa contingent.

TABULAR VIEW OF THE TRIBUTARY AND PROTECTED STATES. 521

Name	Locality.	Area, in square miles.	Population.	Revenue.	Annual Subsidy, Tribute, or other payment.	Military Resources.		
						Artillery.	Cavalry.	Infantry.
BENGAL—continued.								
Jabooa . . . . .	Central India . . . . .	1,348	132,104	Rupees. 141,536	Rupees. 39,000	—	40	125
Borai or Boree . . . . .	Cent In. (Malwa) {	included in that of Jabooa.	included in that of Jabooa.	14,000	—	—	15	30
Jucknowda . . . . .	Ditto . . . . .			10,000	—	—	15	25
Jhujur . . . . .	North-West Provs. (adjacent to Delhi) {	1,230	110,700	600,000	—	180	1,280	1,700
Jobut . . . . .	Cent. In. (Malwa) {			—	—	10,000	—	15
Jowra . . . . .	Ditto . . . . .	872	85,456	800,000	—	50	60	740
Jucknowda (vide Jabooa)	Ditto . . . . .	200	19,600	75,000	—	—	40	150
Koorwace . . . . .	North-West Provs. (near Delhi.) {	200	18,000	—	—	—	60	260
Loharoo . . . . .	Ditto . . . . .			—	—	—	—	—
Macherry (vide Alwur, under Rajpoot States).	N. Eastern Frontier (Bengal).	7,584	75,840	—	—	452	—	3,158
Munnecpoor . . . . .	Deccan . . . . .	76,432	4,650,000	4,908,560	800,000	372	2,424	4,163 <sup>1</sup>
Nagpore or Berar . . . . .	Northern India . . . . .	54,500	1,940,000	3,200,000	—	1,100	—	8,400 <sup>2</sup>
Nepaul . . . . .								
Nizam (vide Hyderabad).								
Nursinghur (vide Omutwarra).								
Omutwarra—								
Rajghur . . . . .	Cent. In. (Malwa) {	1,348	132,104	200,000	—	10	50	150
Nursinghur . . . . .	Ditto . . . . .			275,000	—	20	150	350
Oude . . . . .	North-West Provs. (near Delhi dist.) {	23,738	2,970,000	14,473,380	—	5,304	4,088	44,767 <sup>3</sup>
Patowdee . . . . .	Ditto . . . . .			74	6,660	50,000	—	—
Rajghur (vide Omutwarra)								
Rajpoot Ali (vide Allee Mohun).								
Rajpoot States—								
Alwur or Macherry, including Tejarra.	Rajpootana . . . . .	3,573	280,000	1,800,000	—	—	4,000	11,000
Banswarra . . . . .	Ditto . . . . .	1,440	144,000	95,000 <sup>4</sup>	25,000	—	150	225
Bikanecr . . . . .	Ditto . . . . .	17,676	539,250	650,380	—	—	1,581	2,100 <sup>5</sup>
Boondee . . . . .	Ditto . . . . .	2,291	229,100	500,000 <sup>6</sup>	40,000	150	1,000	520 <sup>7</sup>
Doongerpore . . . . .	Ditto . . . . .	1,000	100,000	109,000	— <sup>8</sup>	—	125	200 <sup>8</sup>
Jessulmere . . . . .	Ditto . . . . .	12,252	74,400	84,720	—	30	754	252
Jypore or Jyenagur . . . . .	Ditto . . . . .	15,251	1,891,124	4,583,950 <sup>9</sup>	400,000	692	2,096	18,377 <sup>10</sup>
Jhallawur . . . . .	Ditto . . . . .	2,200	220,000	1,500,000	80,000	500 <sup>11</sup>	450	3,010
Joudpore . . . . .	Ditto . . . . .	35,672	1,783,600	1,752,520	223,000	—	2,630	5,850 <sup>12</sup>
Kerowlee . . . . .	Ditto . . . . .	1,878	187,800	506,900	—	—	248	546
Kishengurh . . . . .	Ditto . . . . .	724	70,952	—	—	—	—	—
Kotah . . . . .	Ditto . . . . .	4,339	433,900	2,800,000	384,720	601	710	2,140
Odeypore or Mewar . . . . .	Ditto . . . . .	11,614	1,161,400	1,250,000	200,000	—	1,200	4,200 <sup>13</sup>

Notes.—<sup>1</sup> The Rajah is bound by treaty to furnish 1,000 horse to serve with the British army in time of war. His military force, as here stated, is exclusive of a police corps of 2,274 men.

<sup>2</sup> In addition to this body of infantry there is an irregular force of 5,000 men, and a police corps amounting to 2,000 men. An accredited minister from the British Government resides at the court of Nepal, with an escort of 94 rank and file, officered and paid by the British.

<sup>3</sup> The obligation of the British government, under the treaty of 1798, to maintain a force of 10,000 men in Oude, was superseded by the treaty of 1801. Under the provisions of the latter treaty, the British Government are bound to the defence of the kingdom against all enemies, but exercise their own discretion as to the requisite number of troops. The strength of the British subsidiary force amounts at the present time to 5,578 men. By the treaty of 1837, the limit on the number of troops to be maintained by the king was removed, and his majesty may employ such a military establishment as he may deem necessary for the government of his dominions—power being reserved to the British government to insist upon reduction in case of excess. A police corps of 100 horse and 460 foot is also maintained by the King of Oude for the protection of the British frontiers of Goruckpoor and Shahjehanpoor, bordering on the territory of Oude.

<sup>4</sup> Irrespective of the revenues of feudal grants and religious endowments.

<sup>5</sup> The military force is irrespective of the quotas to be furnished by the Feudal Chiefs, amounting to 1,500 horse, but inclusive of a mounted police, numbering 535 men.

<sup>6</sup> Irrespective of feudal estates and religious endowments.

<sup>7</sup> Irrespective of a police force of 2,000 men, and also of an irregular feudal force of 2,500.

<sup>8</sup> The tribute is not to exceed three-eighths of the annual revenue. The force is exclusive of a police force, amounting to 100 men.

<sup>9</sup> The revenue, as here stated, is independent of feudal jaghires and charitable endowments, producing 4,000,000 more. The amount of tribute payable by Jypore, under the treaty of 1818, namely, 800,000 rupees, was reduced, in 1842, to 400,000 rupees.

<sup>10</sup> The military force here stated is exclusive of the troops maintained by the Feudatory Chiefs, amounting to 5,690 men, and exclusive of the garrisons of forts, amounting to 5,267.

<sup>11</sup> There is also a police force of 1,500 men in Jhallawur.

<sup>12</sup> This force is irrespective of the Joudpore legion, which was embodied in 1847, in lieu of the Joudpore contingent, and consists of—artillery, 31; cavalry, 254; infantry, 739; Bhed companies, 222. Total, 1,246 men, commanded by British officers. There is also a force of 2,000 men maintained by the Feudal Chiefs.

<sup>13</sup> Irrespective of the Kotah contingent, which consists of—cavalry, 285; artillery, 66; infantry, 799. Total, 1,148 men, commanded by British officers. There is also a police force consisting of 2,000 men.

522 TABULAR VIEW OF THE TRIBUTARY AND PROTECTED STATES.

Name.	Locality.	Area, in square miles.	Popula- tion.	Revenue.	Annual Subsidy, Tribute, or other payment.	Military Resources.		
						Artil- lery.	Cavalry.	Infan- try.
BENGAL—continued.								
Rajpoot States—continued.				Rupees.	Rupees.			
Pertabgurh & Dowlea	Rajpootana . . .	1,457	145,700	175,000	57,874 <sup>1</sup>	—	250	300
Serohee	Ditto . . .	3,024	151,200	74,060	{ 3-8ths of An. Rev.	—	200	600*
Ranpore . . .	{ North-West Provs. (Barcelly). Cent. In. (Malwa)	720	320,400	1,000,900	—	50	497	1,387
Rutlam		936	91,728	450,000	66,150	10	225	600
Saugor and Nerbudda Ter- ritories—								
Kothee . . .	{ Cent. In. (Saugor and Nerbudda).	100	30,000	47,000	—	1	10	50
Myheer . . .		Ditto	1,026	100,000	64,500	—	14	25
Ocheyrah . . .	Ditto . . .	436	120,000	66,320	—	—	—	—
Rewa and Mookund- } pore.	Ditto . . .	9,827	1,200,000	2,000,000	—	29	842	7,291
Sohawul . . .	Ditto . . .	179	80,000	32,000	—	—	—	—
Shahgurh . . .	Ditto . . .	676	30,000	—	—	8	150	800
Scindia's Dominions (vide Gwalior).								
Seeta Mow	Cent. In. (Malwa)	208	20,384	90,000	47,250	—	130	225
Sikh Protected States— <sup>3</sup>								
Boorea (Dealgurh)	Cis-Sutlej . . .	80	11,920	50,000	—	—	20	50
Chickrowlee (Kulseah)	Ditto . . .	63	9,387	165,000	—	—	75	50
Furcedkote . . .	Ditto . . .	308	45,892	45,000	—	—	60	100
Jheend . . .	Ditto . . .	376	56,024	300,000	—	—	250	500
Mulair Kotla . . .	Ditto . . .	144	21,456	390,000	—	—	168	200
Mundote . . .	Ditto . . .	780	116,220	—	—	—	100	60
Nabha . . .	Ditto . . .	541	80,609	400,000	—	—	400	500
Puttiala . . .	Ditto . . .	4,448	662,752	—	—	—	1,500	1,500
Rai Kote . . .	Ditto . . .	6	894	5,500	—	—	12	20
South-West Frontier of Bengal— <sup>4</sup>								
Bombra . . .	Orissa . . .	1,224	55,980	10,000	340	—	—	—
Bonei . . .	Ditto . . .	1,057	47,565	6,000	200	—	—	—
Pora Samba . . .	Ditto . . .	622	27,990	4,000	160	—	—	—
Burgun . . .	Ditto . . .	399	17,955	10,000	320	—	—	—
Gangpoor . . .	Ditto . . .	2,493	112,185	10,000	500	—	—	—
Jushpore . . .	Ditto . . .	617	27,765	10,000	{ Included in Sir- gooja.	—	—	—
Keriall or Koren, in- } cluding Bhokur.	Ditto . . .	1,512	68,040	20,000	1,095	—	—	—
Korea . . .	Ditto . . .	2,225	100,000	10,000	1,600	—	—	—
Nowagur or Bindra } Nowagur.	Ditto . . .	1,512	68,040	5,000	400	—	—	—
Odeypore . . .	Ditto . . .	2,306	133,748	15,000	{ Included in Sir- gooja.	—	—	—
Patna . . .	Ditto . . .	1,158	52,110	25,000	600	—	—	—
Phooljee . . .	Ditto . . .	890	40,050	6,000	440	—	—	—
Rhyghur . . .	Ditto . . .	1,421	63,945	20,000	170	—	—	—
Sarunghur . . .	Ditto . . .	799	35,955	6,000	1,400	—	—	—
Singboom ) States in	{ Ditto . . .	—	—	4,000	107	—	—	—
Kursava ) British dis- trict of Singboom.								
Srickala . . .	Ditto . . .	—	—	10,000	—	—	—	—
Sirgooja . . .	Ditto . . .	5,441	316,252	50,000	3,200	—	—	—
Sehnpoor . . .	Ditto . . .	1,467	66,015	60,000	6,400	—	—	—
Suctee . . .	Ditto . . .	268	12,060	4,000	240	—	—	—
Sikkim . . .	Northern India . . .	1,670	61,766	—	—	—	—	—
Tijarra (vide Alwur, Raj- poot States).								
Tonk, and other Depen- dencies of Ameer Khan, viz.—								
1. Chuppra; 2. Nim- bera; 3. Perawa; 4. Rampoor; 5. Se- roujee.	Central India . . .	1,864	182,672	820,000	—	—	—	—

Notes.—<sup>1</sup> The tribute is received by the British Government, but paid over to Holcar.

<sup>2</sup> These troops, as well as the force maintained by feudatories, amounting to 905 cavalry and 5,300 infantry, are employed also in revenue and police duties.

<sup>3</sup> The Sikh States were taken under British protection by treaty with Runjeet Sing, ruler of the Punjab, dated 25th April, 1806. All but those above mentioned have been deprived of independent authority, in consequence of failure in their allegiance during the war with the Sikhs.

<sup>4</sup> These States are comprised within the territory ceded to the British by the Rajah of Nagpore, under the treaty of 1826.



TABULAR VIEW OF THE TRIBUTARY AND PROTECTED STATES. 523

Name.	Locality.	Area, in square miles.	Population.	Revenue.	Annual Subsidy, Tribute, or other payment.	Military Resources.		
						Artillery.	Cavalry.	Infantry.
<b>BENGAL—continued.</b>								
<i>Tonk, &amp;c.—continued.</i>								
Tipperah <sup>1</sup>	Eastern India, adjacent to Burmah.	7,632	—	—	—	—	—	—
Tuleram (Senaputy's Territory).		Eastern In. (Assam)	2,000	30,000	—	—	—	—
<b>MADRAS.</b>								
Cochin <sup>2</sup>	Coast of Malabar	1,988	288,176	486,000	240,000	—	—	—
Jeypore, and the Hill Zemindars.	Orissa	13,041	391,230	—	16,000	—	—	—
Mysore	Southern India	30,886	3,000,000	6,931,870	2,450,000	—	—	2,472
Poodocottab (Rajah Tomdiman's Dominions).	Southern India (Madura).	1,165	61,745	—	—	—	—	—
Travancore	Southern India	4,722	1,011,824	4,158,075	796,430	—	—	—
<b>BOMBAY.</b>								
Balasinore	Guzerat	258	19,092	41,548	10,000	—	8	50
Bandsa	Ditto	325	24,050	47,000	7,800	—	—	77
Baroda (Dominions of the Guicowar.	Ditto	4,399	325,526	6,687,440	—	63	5,912 <sup>3</sup>	3,054
Cambay	Guzerat	500	37,000	300,000	60,000	—	200	1,500
Colapore, including its dependencies, viz.—	Southern Maharratta country.	—	—	550,000	—	27	450	3,848 <sup>4</sup>
Bhowda	—	—	—	51,662	—	—	16	468
Inchulkunjco	—	—	—	75,000	—	—	50	1,051
Khagul	—	—	—	72,760	—	—	25	672
Vishalgur	—	—	—	123,146	—	—	5	164
113 Surinjams, or minor dependencies.	—	—	—	631,628	—	—	—	—
Cutch	Western India	6,764	500,536	738,423	200,000	—	—	—
Daung Rajahs	Guzerat	950	70,300	—	—	—	—	—
Dhurumpore	{ Ditto (collectorate of Surat). }	225	16,650	91,000	9,000	—	105	—
Guzerat (Guicowar's Dominions), vide Baroda.	—	—	—	—	—	—	—	—
Guzerat Petty States — <sup>5</sup>	—	—	—	—	—	—	—	—
Chowrar <sup>6</sup>	Guzerat	225	2,500	9,000	—	—	25	—
Pahlunpore	Ditto	1,850	130,000	298,838	50,000	10	110	429
Radhunpore	Ditto	850	45,000	165,000	—	20	255	197
Baubier	Ditto	120	500	1,206	—	—	—	—
Charcut	Ditto	80	2,500	2,524	—	—	—	—
Dcodar	Ditto	80	2,000	3,650	—	—	—	—
Kankrej	Ditto	—	—	12,895	—	—	—	—
Merwara	Ditto	included in Thurraud	—	4,220	—	—	6	1
Santulpoor	Ditto	—	—	11,346	—	—	—	—
Soegaun	Ditto	64	4,500	5,404	—	—	—	—
Therwarra	Ditto	48	800	2,363	—	—	—	—
Thurra	Ditto	—	—	6,460	—	—	24	8
Thurraud	Ditto	600	23,000	11,335	—	—	20	18
Warrye	Ditto	299	20,000	16,770	—	—	—	—
Wow	Ditto	364	10,000	7,360	—	—	15	8

Notes.—<sup>1</sup> This district is hilly, much covered with jungle, and very thinly inhabited.

<sup>2</sup> In Cochin, in consequence of the misrule of the Rajah, the affairs of the State have been conducted, since 1839, by a native minister, in communication with the British resident.

<sup>3</sup> This force includes a contingent of 3,000 cavalry, which acts with the British subsidiary force, but is supported at the Guicowar's expense, and paid and equipped agreeably to the suggestions of the British Government. There is also another body of troops (the Guzerat Irregular Horse), consisting of 756 men, paid by the Guicowar, but commanded by British officers, and stationed in the British district of Ahmedabad. In addition to the foregoing there is a police force, consisting of 4,000 men. The military force in Guzerat is thus composed of—1st. British subsidiary, 4,000 infantry; 2 regiments of cavalry, and 1 company of artillery. 2nd. Guicowar's Regular Troops, 6,959. 3rd. Guicowar's Contingent, 3,000 cavalry. 4th. Guzerat Irregular Horse, 756. 5th. Police Corps, 4,000.

<sup>4</sup> The Colapore force here specified consists of native troops, uncontrolled as to discipline; they are assembled under the orders of the political superintendent whenever required. There is, however, an efficient force (the Colapore Local Corps), commanded by British officers, and consisting of—cavalry, 303; infantry, 604; total, 907. The military force of the four Feudal Chiefs is shown under "Military Resources." They are bound to furnish a contingent for their feudal superior, consisting of—cavalry, 246; infantry, 580; total, 826. Besides the above there is a regular police corps of 674 men, and a body termed extra fighting-men, available for police duties, amounting to 3,113 men.

<sup>5</sup> Quotas of horse and foot are furnished by chiefs in the petty States of Guzerat to their feudal superiors, which have not been included in the military resources of each State. They amount, in the aggregate to 1,496 horse and 16,954 foot.

<sup>6</sup> The petty State of Chowrar is divided among a number of chieftains.

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Name.	Locality.	Area, in square miles.	Population.	Revenue.	Annual Subsidy, Tribute, or other payment.	Military Resources.		
						Artillery.	Cavalry.	Infantry.
<b>BOMBAY—continued.</b>								
Guzerat Petty States—continued.						Rupees.	Rupees.	
Hursool ( <i>vide</i> Peint).	Guzerat	19,850	1,463,900	4,501,723	1,047,396	102	3,888	8,122
Kattywar <sup>1</sup> Petty Chiefs . . .	Seinde	5,000	105,000	—	—	47	727	105
Myhee Caunta <sup>2</sup> is distributed into Six Districts—1st. Nance Marwar—comprising Edur, Ahmednuggur, Morassa, Hursole, Byer, Lintoee, Daunta, Malpoor, Pole, Pall, Posuna, Gudwarra, Wallasun, and Hurrole. 2nd. Behwur—comprising Gorewarra, Runassum, Mohunpoor, Surdooe, Roolpal, Boroodra, Wurragaon, and Dhudulea. 3rd. Sabur Caunta—composed of Cooly possessions on the eastern bank of the Sabur Muttee, with the Rajpoot districts of Wursora, Maunsa, and Peethapore, on the western bank of that river. 4th. Kuttosun,— composed exclusively of Cooly possessions. 5th. Byul, or Bawcesee—comprising Wasna and Sadra. 6th. Watruck—comprising Amleyara, Mandwah, Khural, Bar Moorah, & Satoomba.								
Peint and Hursool . . .	Guzerat	3,400	150,000	500,000 <sup>3</sup>	138,400	—	291	630 <sup>4</sup>
Rewa Caunta, comprising: 1st. Barreea or Deoghur Barreea. 2nd. Loonawarra . . .	Collectorate of Ahmednuggur. } Guzerat . . . Ditto . . .	750 870 500	55,500 64,380 37,000	29,724 57,651 40,000	3,360 12,000 19,200	— — —	— 43 50	100 168 100

Notes.—<sup>1</sup> The province of Kattywar is divided among a considerable number of Hindoo chiefs. Some of them are under the direct authority of the British Government; the remainder, though subject to the Guicowar, have also been placed under the control and management of the British Government, which collects the tribute and accounts for it to the Guicowar. The following Table exhibits the division of the province into talooks, or districts, with the number of chiefs, the amount of revenue and tribute, and the military resources of each:—

TALOOKAS.	Number of Chiefs in each Talooka.	Revenue.	Tribute.	Remainder.	Sebundy Force.		
					Artillery.	Cavalry.	Infantry.
		Rupees.	Rupees.	Rupees.			
Soruth . . . . .	3	628,000	99,959	528,041	30	903	1,930
Hallar . . . . .	26	973,100	322,461	550,639	25	827	1,702
Muchookanta . . . . .	2	151,000	66,358	84,642	20	102	175
Babriawar . . . . .	32	30,200	8,127	22,073	—	40	65
Ond Surua . . . . .	23	32,923	10,307	22,616	—	2	5
Jhalawar . . . . .	51	831,900	238,143	593,757	7	472	717
Gohelwar . . . . .	27	725,300	146,492	578,808	—	915	1,720
Katteewar . . . . .	47	855,800	121,113	734,687	20	480	895
Burda . . . . .	1	200,000	34,436	165,564	—	100	400
Okamundel, &c. . . . .	4	73,500	—	73,500	—	47	513
Total . . . . .	216	4,501,723	1,047,396	3,454,327	102	3,888	8,122

<sup>2</sup> The province of the Myhee Caunta is divided among several petty chiefs, tributary to the Guicowar. The whole province has been placed under the control and management of the British Government, which collects the Guicowar's dues, and pays over the amount to that prince.

<sup>3</sup> Revenue of Edur and Ahmednuggur, 234,000 rupees; of the remaining states, 266,000. Total revenue of Myhee Caunta, 500,000 rupees.

<sup>4</sup> The force maintained by the other chiefs of the Myhee Caunta is stated to consist of about 6,000 men

Name.	Locality.	Area, in square miles.	Population.	Revenue.	Annual Subsidy, Tribute, or other payment.	Military Resources.		
						Artillery.	Cavalry.	Infantry.
<b>BOMBAY—continued.</b>								
Rewa Caunta—continued.				Rupees.	Rupees.			
3rd. Mewassee Chiefs, residing on the banks of the Nerbudda and the Myhee.	Guzerat	375	27,750	—	67,613	—	—	—
4th. Odeypore (Chota) or Mohun.	Ditto	1,059	78,366	74,000	10,500	—	70	368
5th. Rajpeeppla	Ditto	1,650	122,100	203,966	60,000	—	98	286
6th. Soauth	Ditto	425	31,450	20,000	7,000	—	40	100
<b>Sattara Jaghires—</b>								
1. Akulkote	Sattara	The area and population of these States cannot be given separately from the principality of Sattara	120,000	—	—	—	122	493
2. Bhore	Ditto						20	908
3. Juth	Ditto						10	202
4. Ounde	Ditto						25	255
5. Phultun	Ditto						15	175
Wyhee	Ditto	—	—	—	—	—	—	—
Sawunt Warree	South Concan	800	120,000	200,000	—	—	—	611
<b>Sinde (vide Khyrpore).</b>								
<b>Southern Mahratta Jaghires—</b>								
Hablee	Southern Mahratta country.	3,700	410,700	10,024	61,720	—	14	75
Jhumkundee				270,246		—	102	785
Koonwar				167,392		—	43	682
The two chiefs of Meeruj				275,343		—	87	1,053
Moodhole				94,645		—	35	420
Nurgoond				51,609		—	103	643
Sanglee				468,044		—	575	3,900
Savanore				29,670		—	25	431
Shedbal				123,599		—	68	212
Sucheen				89,000		—	—	18
Wusravce (Bheel Chiefs)	Guzerat	300	22,200	—	—	—	—	—
	Ditto (southern boundary of Rajpeeppla.	450	33,300	—	—	—	—	—
<b>ABSTRACT—</b>								
<i>Native States,</i>								
Bengal	—	607,949	44,255,517	84,151,786	7,995,471	12,593	54,671	287,309
Madras	—	51,802	4,752,975	4,158,075	796,430	—	—	2,472
Bombay	—	57,375	4,393,400	18,670,820	1,862,990	369	13,632	27,872
		717,126	53,401,892	106,980,681	10,654,891	12,962	68,303	317,653 <sup>1</sup>

*Note.*—It will be seen from the above that the military resources of the native princes of India comprise a force of 393,918 men. Where no distinction has been made in the official records between the cavalry and infantry of a native state, the whole armed force has been included in this statement under the head of infantry. In reference to this enormous force it is proper to observe, that considerable portions of the regular troops of native States are described in the official returns as fitted rather for police purposes than as available for regular military duties. Where the military force of a native prince is not under the command of European officers, it rarely happens that there exists any regular system of payment; and, under such circumstances, a native army is invariably found to be badly organised and inefficient. The figures above given do not include either the police corps or the quotas of troops which the military chiefs are bound to furnish to their feudal superior. <sup>1</sup> Including officers attached to native regiments.

Abstract of Population, Area of British and other European States, and Army of British Government in India, exclusive of H. M. European Cavalry and Infantry, comprising 30,000 men.

ABSTRACT OF POPULATION.				ARMY OF BRITISH GOVERNMENT IN INDIA.			
	Area.	Population.	Description.	European.	Company's Troops.		
					Natives.	Total.	
<i>British States—</i>							
Bengal	Sq. Miles.	47,958,320	Engineers.	321	2,248	2,569	
North-Western Provinces	85,571	23,800,549	Artillery	7,436	9,004	16,440	
Madras	135,680	22,301,697	Cavalry	469	30,851	31,884	
Bombay	120,065	11,109,067	Infantry	9,648	193,942	229,406	
Eastern Straits Settlements	1,575	202,540	Medical	1,111	652	1,763	
	668,543	105,169,633	Warrant Officers	243	—	243	
<i>Foreign States—</i>							
French (Pondicherry, Mahe, &c.)	188	171,217	Veterans	700	3,424	4,124	
Portuguese (Goa, Diu, Denaun.)	800	not known.					
Total	988	171,217	Total	19,928	240,121	289,529	

The Contingent Troops of the Native States commanded by British officers, and available, under treaties, to the British Government, amount to about 32,000 men, viz.:—Hyderabad (Nizam's) Auxiliary Force, 8,094; Gwalior (Scindia's) Contingent, 8,401; Kotah Contingent, 1,148; Mysore Horse, 4,000; Guzerat (Guicowar's) Contingent, 3,756; Bhopal Contingent, 829; Malwa United Contingent, 1,617; Malwa Bheel Corps, 648; Joudpore Legion, 1,246; Meywar Bheel Corps, 1,054; Colapore Local Horse, 907; Sawunt Warree Local Corps, 611. Total, 32,311. Holkar and the Rajah of Nagpore are bound by treaty to furnish contingents, the former of 3,000, and the latter of 1,000 horse.

The relation between the Anglo-Indian government and native states, is thus described :

“ The states with which subsidiary alliances have been contracted are ten in number :—Cochin; Cutch; Guzerat (territory of the Guicowar); Gwalior (possessions of Scindia); Hyderabad (territory of the Nizam); Indore (territory of Holcar); Mysore; Nagpore, or Berar; Oude; Travancore. In some of these states, enumerated in the above list, the charge for the maintenance of the subsidiary force has been commuted by various cessions of territory at the undermentioned dates, viz.:—*Guzerat* (Guicowar), ceded districts in Guzerat, in 1805; and Ahmedabad farm, &c., in 1817: *Gwalior*\* (Scindia), Upper Doab, Delhi territory, &c., 1803: *Hyderabad*, (Nizam), Northern circars, 1766; Guntoor, 1788; districts acquired from Tippoo, 1800; *Indore* (Holcar), Candeish and other districts, 1818; *Oude*, Benares, 1775; Goruckpore, Lower Doab, Bareilly, &c., 1801. The Rajah of Nagpore, or Berar, in addition to the cession of territory on the Nerbudda and parts adjacent, pays to the British government an annual subsidy of £80,000. The four remaining subsidiary states pay annual subsidy, as under:—Cochin, £24,000; Cutch, £20,000; Mysore, £245,000; Travancore, £79,643. The British government has reserved to itself the right, in the event of misrule, of assuming the management of the country in the states of Cochin, † Mysore, ‡ Nagpore, § Oude, § Travancore. ¶ The other subsidiary states—Cutch, Guzerat, Gwalior, Hyderabad, Indore, are not subject to control in their internal administration; yet so oppressive in some instances have been the rule of the chiefs, and, in others, so lawless the habits of the people, that the interference of the British government has been occasionally rendered absolutely necessary, in some of the above *subsidiary*, as well as in several of the *protected* states. Indeed, a clear necessity must be held to confer the right of such interference in all cases, as the prevalence of anarchy and misrule in any district must be fraught with danger to all around it; while its long continuance would lead to the dissolution of the state itself where it prevailed, and, consequently, interference would become essential to the effective exercise of that protection which the British government has engaged to afford. Besides the native states having subsidiary treaties, there are about two hundred ¶ others which acknowledge the supremacy of the British government, and which, by treaty or other engagement, are entitled to its protection. The rulers of these states are of various creeds, as shown in the

\* “ By the treaty of 1817, funds were set apart for the payment of a contingent to be furnished by Scindia, and commanded by British officers. These provisions were modified by treaty in April, 1820, and by a new arrangement in 1836. By the treaty of Gwalior, concluded in 1844, certain districts were assigned to the British government for the maintenance of an increased force, to be commanded by British officers, and stationed within Scindia’s territories.”

† “ In Cochin, in consequence of the mismanagement of the rajah, the affairs of the state have been conducted, since 1839, by a native minister in communication with the British resident.”

‡ “ In respect to Mysore, the administration was assumed by the British government in 1834, in consequence of the misrule of the rajah. The claim of the rajah to be reinstated was deemed inadmissible in 1847, on the ground of his incompetency to govern.”

§ “ Oude and Nagpore remain under the government of their respective rulers.”

following list :—Mussulman; Hindoo, or orthodox Brahmins; Mahratta, Boondela, Rajpoot, Jaut, Sikh—all professing Hindooism, with some modifications; Bheel. In some of the petty states included in the above enumeration, the chiefs are not absolutely independent, even as to matters of ordinary internal administration. In several states on the south-west frontier of Bengal (Sirgooja, and other districts), civil justice is administered by the chiefs, subject to an appeal to the British agent, while in criminal matters their jurisdiction is still more strictly limited.\*\* Somewhat similar is the position of the southern Mahratta jaghiredars, who are required to refer all serious criminal matters for British adjudication. In two of the protected states, Colapore and Sawunt Warree, †† the administration has been assumed by the British government, and carried on in the names of the native rulers, who are in the position of stipendiaries. In respect to Colapore, the re-transfer of the government to the minor chief is made dependent upon the opinion which may be entertained by the British government of his character, disposition, and capacity to govern. In Sawunt Warree, the heir apparent, having forfeited his rights, the country, upon the death of the present chief, will be at the disposal of the paramount authority. In some other states, as those in Kattywar, the Myhee and Rewa Cauntas, and others which are tributary to the Guicowar, or ruler of Guzerat, arrangements have been made, under which the Guicowar abstains from all interference, and the British government undertakes the management of the country, guaranteeing the Guicowar’s tribute. In carrying out such arrangements, the British government has conferred important benefits upon the country by abolishing infanticide, suttee, slave-dealing, and the marauding system, termed *barwuttee*, †† as well as by the introduction of a criminal court for the trial of the more serious offences, through the agency of the British resident; the native chiefs of the several states within the jurisdiction of the court acting as assessors. From 1829, when the practice of suttee was abolished throughout the British dominions, the British government have laboured to procure its abolition in the native states of India, and to a great extent succeeded. This success has been attained without either actual or threatened coercion, resort to such means having been deemed indiscreet; but by vigilant watchfulness for appropriate opportunities and perseverance in well-timed suggestions, the desired object has been effected in almost every native state where the rite was practised.”—(Thornton’s *Official Report*, 1853.)

|| “ In 1805, the entire management of the state of Travancore was assumed by the British; but in the year 1813, the minor rajah, upon attaining his sixteenth year, was admitted to the full enjoyment of his rights.”

¶ “ This number does not include the petty rajahs in the Cossya and Garrow Hills, those of the Cuttack Mehals, or the chiefs in the province of Kattywar. The addition of these would more than double the number given in the text.”

\*\* “ The power of passing sentence not involving the loss of life is exercised by them; but where the punishment is severe, it is under the control of the British agent, while sentence of death can only be passed by him in cases regularly brought before his tribunal; and each infliction of punishment must be included in a monthly report to the government.”

†† “ These two states were long convulsed by internal disorders, which at length burst into a general rebellion.”

‡‡ “ Resort to indiscriminate plunder, with a view to extort the favourable settlement of a dispute with a feudal superior.”

## CHAPTER IV.

### RELIGION—CHRISTIAN MISSIONS—EDUCATION—THE PRESS—AND CRIME.

INDIA exemplifies the truth of the assertion,\* that religion is inseparable from the nature of man: the savage and the sage alike frame some system of theological belief,—some mode of communicating with the Deity,—some link of spiritual connexion between the created and the Creator;† but every attempt to invest humanity with the attributes of Divinity has ended in the deification of stocks and stones,‡—in the concoction of monstrous frauds, and in the practice of the grossest sensuality, which corrupt alike the souls and the bodies of the worshippers.

In Hindoostan the principle of a universal religion is illustrated in every conceivable form, from abstract Monotheism to complex Pantheism,—from the worship of the sun, as the representative of celestial power, to the rudely-carved image which a Brahmin

\* See Preface to second edition of my *Analysis of the Bible with reference to the Social Duty of Man.*

† From the highest to the lowest link in the chain which connects in one genus every variety of the human race, all believe in a spiritual power that is superior to man,—in an invisible world, and in a resurrection after death: this is manifested by dread of an unseen good or evil deity,—by a persuasion of the existence of fairies or ghosts,—by the sepulture of the body,—and by placing in the grave things deemed necessary in another stage of existence.

‡ The Rev. William Arthur, in his admirable work, *A Mission to Mysoor*, refers to the arguments he was in the habit of having with Brahmins, and says—“They frequently took strong ground in favour of idolatry, urging that the human mind is so unstable, that it cannot be fixed on any spiritual object without some appeal to the senses; that, therefore, to worship by mere mental effort, without external aid, is impossible; but that, by placing an image before the eye, they can fix the mind on it, and say, ‘*Thou art God*?’ and by this means form a conception, and then worship.” It was probably this idea that unhappily induced the early Christian church to admit images, pictures, and representations of holy men, into places of public worship; though it is not so easy to account for the introduction of Maryolatry. The necessity of engaging the usually wandering mind by some visual object is, I believe, the plea used by Romanists and Greeks for the frequent elevation of the crucifix; and it is quite possible that many pious persons deem its presence essential: the danger is not in the crucifix, or the figure of the Redeemer thereon, but in the representation degenerating into formalism. On the other hand, it is to be feared that many professing protestants have few ideas of vital Christianity, and consider its solemn duties fulfilled by an hebdomadal public worship.

§ Thus acknowledged in one of the Hindoo prayers:—“We bow to Him whose glory is the perpetual theme of every speech;—Him first, Him last,—the Supreme Lord of the boundless world;—who is primeval Light, who is

is supposed to endue with sentient existence,—from the sacrificial offering of fruit and flowers, to the immolation of human victims: here, also, we see this natural feeling taken advantage of by artful men to construct Brahminical and Buddhistical rituals, which, embracing every stage of life, and involving monotonous routine, completely subjugate the mass to a dominant priesthood, who claim peculiar sanctity, and use their assumed prerogatives for the retention of the mass of their fellow-beings in a state of moral degradation and of intellectual darkness.

Yet, amidst this corruption and blindness, some rays of truth are still acknowledged—such as a supreme First Cause,§ with his triune attributes of omnipotence, omniscience, omnipresence;|| creation, preservation, destruction; the immortality of the soul, individual responsibility, atonement for sin, resurrection to judgment, heaven and hell; and a belief in unscen beings pervading space, and seeking to obtain a directing influence over probationary creatures for good or for evil.¶ But these cardinal points are mingled with pernicious doctrines, supersti-

without His like,—indivisible and infinite,—the origin of all existing things, movable or stationary.”

|| The Hindoo expression means *all-pervasive*.

¶ The Hindoos believe the Deity to be in everything, and they typify Him in accordance with their imaginations. *Brahm* or *Brihm* is supposed to have had three incarnations, viz., *Brahma*, the *Creator*; *Vishnu*, the *Preserver*; *Siva*, the *Destroyer*:—who have become incarnate at different times and in various forms, for many objects. To these are added innumerable inferior gods, presiding over earth, air, and water, and whatever may be therein. Temples and shrines are erected to a multitude of deities, to whom homage or worship is tendered, and tribute or offerings made. The Pagan deities, in every country and in all ages, have more or less an affinity to each other; they refer, generally, to the powers of nature, and to the wants or civilising appliances of man; but they all merge into, or centre in, one Supreme Being: thus there was an intimate relation between the Greek and Indian mythology. The Brahminical and the Magian faith had many points of union: the sun was the ostensible representation of Divine power; the fire-altar of both may be traced to that of the Hebrews; and the idolatry of the calf, cow, or bull, have all a common origin. Ferishta states that, during the era of Roostum, when Soorya, a Hindoo, reigned over Hindoostan, a Brahmin persuaded the king “to set up idols; and from that period the Hindoos became idolaters, before which they, like the Persians, worshipped the sun and stars.”—(Vol. i., p. 68.) The Mythrae religion at one time existed in all the countries between the Bosphorus and the Indus; vestiges are still seen at Persepolis, at Bamian, and in various parts of India. In all Pagan systems there is a vagueness with reference to the Deity; for it is only through the Saviour that God can be known. With regard to the soul, it is thus negatively described by the author of the great Hindoo work, entitled *Mahabarat*:—“Some regard the soul as a wonder; others hear of it with astonishment; but no one knoweth it: the weapon divideth it not, the fire burneth it not, the water corrupteth it not, the wind dryeth it not away; for it is indivisible, inconsumable, incorruptible: it is eternal, universal, permanent, immovable; it is invisible, inconceivable, and unalterable.” The shastras, or “sacred” books, contain also many remarkable and even sublime passages; and their character

tious observances, cruel rites, and carnal indulgences; hence the pure, merciful, and loving\* character of God is unknown, the innately sinful nature of man imperfectly understood, the positive necessity of a Redeemer unappreciated, and the urgent want of a Sanctifier unfelt.

It is not therefore surprising, that in the yearnings of the spirit for a higher, holier enjoyment than this world can afford, that sincere devotees in India, as in other countries and in every age, devoid of the light of Christianity, deem suicide a virtue; † torture of the body a substitute for penance of the soul; ‡ ablation sufficient for purification; solitude the only mode of avoiding temptation; offerings to idols an atonement for sin; pilgrimages to saintly shrines a

is well summed up by the Rev. William Arthur, who has attentively studied the subject. This Christian writer says—"Taking those books as a whole, no works of our most shameless authors are so unblushing or so deleterious: the *Sama Veda* treats drunkenness as a celestial pastime; all the gods are represented as playing at will with truth, honour, chastity, natural affection, and every virtue, running for sport into the vilest excesses, and consecrating by their example all hateful deeds. Falsehood, if with a pious motive, has a direct sanction. Menu declares that 'a giver of false evidence from a pious motive, even though he know the truth, shall not lose a seat in heaven: such evidence men call divine speech.' Vishnu has often preserved the gods by the most wicked impostures. Lies flow familiarly from divine lips, and thus lose all disrepute in mortal eyes. The amours of the gods are so detailed as to corrupt all who read and admire them; while they argue, on the part of the writers, a horrible familiarity with every variety of debauch. In the lofty poetry of the sacred books are musically sung expressions of a coarseness that would be spurned from the vilest ballad. Part of the retinue of every temple consists of priestesses, who are the only educated women in the country, and whose profession it is to corrupt the public morals. In some of the temples, excesses are at certain times openly committed which would be concealed even in our lowest dens of vice."—(Arthur's *Mission to Mysoor*, p. 489. London: Hamilton, Paternoster-row.) Such is the system; and this is but a faint shadowing of its fearful wickedness, against which Christianity has to contend. Simple aboriginal tribes have an indefinite notion of an Almighty superintending providence. Thus the Todawar of the Neilgherries, on first seeing the sun daily, or a lamp, uses the following prayer, with his face turned to the sky:—"Oh! thou the Creator of this and of all worlds—the greatest of the great, who art with us as well in these mountains as in the wilderness,—who keepest the wreaths that adorn our heads from fading, and who guardest the foot from the thorn—God among a hundred—may we be prosperous." They believe that the soul, after death, goes to the *Om-nor* (large country), about which they have scarcely an idea; they sacrifice living animals, and burn them on a rude altar: the dead are buried in a dark, secluded valley. A blood sacrifice is deemed essential by all these tribes, to procure remission from sin. The relative antiquity of Brahminism and Buddhism,—their common origin and separation,—their points of unity or dissonance,—and the various other forms of religion in India, are subjects beyond my limits in this work.

\* The only love that I can find recognised in reference to the Deity, is similar to that acknowledged by the Greeks: hence Sir William Jones thus apostrophises the Hindoo Cameo or Kama Deva (Cupid):—

"Where'er thy seat, whate'er thy name,  
Earth, sea, and sky, thy reign proclaim:  
Wreathy smiles and rosy treasures,  
Are thy purest, sweetest pleasures;  
All animals to thee their tribute bring,  
And hail thee universal king!"

I quote from memory this beautiful version of Indian stanzas.

means of obtaining peace or rest; the maintenance of perpetual fire the highest privilege; contemplation of God the nearest approximation to communion; and human sacrifice a propitiation of Divine wrath. §

With such creeds and such worship, perpetuated for centuries, the votaries, both priests and laymen, must necessarily be sunk to a depth of degradation from whence no mere human efforts can elevate them, and which the untiring perseverance of Christianity, with the guidance of the Spirit, can only hope to meliorate in the existing generation.

Among the numerous creeds which pervade India, the most prominent are Hindooism, or worshippers of Brahm; || Buddhists, devoted to Buddha; ¶ Parsees, disciples of Zoroaster; \*\* Moslems, †† followers of

† See section on crime for the number of suicides committed annually at Madras.

‡ The self-inflicted torture which Hindoo fanatics undergo, with a view to the remission of sin, and to obtain the favour of their deity, is revolting; but it indicates strong feelings on the subject. Among them may be mentioned:—standing for years on the legs, which become swollen and putrefying masses of corruption; keeping an arm erect until the muscles of the *humerus* are attenuated and the joint ankylosed (fixed in the socket); lying on a bed of spikes until the smooth skin is converted into a series of indurated nodules; turning the head over the shoulders, and gazing at the sky, so that, when fixed in that posture, the twist of the gullet prevents aught but liquids passing into the stomach; crawling like reptiles, or rolling as a hedgehog along the earth for years; swinging before a slow fire, or hanging with the head downwards, suspended over fierce flames; piercing the tongue with spits; inserting an iron rod in the eye-socket, from which a lamp is hung; burying up to the neck in the ground; clenching the fist until the nails grow through the back of the hand; fasting for forty or the greatest practicable number of days; gazing at the sun with four fires around, until blindness ensues. These are some of the practices of the Yogis or Sanyases, and other devotees.

§ The Ganges is considered sacred by the orthodox Hindoos, and its waters everywhere, from their source in the Himalaya to their exit in the Bay of Bengal, are regarded with peculiar sanctity. It is supposed that, at the moment of dissolution, a person placed therein will have all his transgressions obliterated. Should a Hindoo be far distant, the Brahmins enjoin that he should think intensely of the Ganges at the hour of death, and he will not fail of his reward. To die within sight of the stream is pronounced to be holy; to die besmeared with its mud, and partly immersed in the river, holier still; even to be drowned in it by accident, is supposed to secure eternal happiness. Until the close of the 18th century, the Brahmins, taking advantage of this superstitious idea, persuaded tens of thousands of Hindoos to assemble in January annually on the island of Gunga Saugor, at the sea mouth of the Ganges, to perform obsequies for the good of their deceased ancestors, and to induce many hundred children to be cast living into the torrent by their parents, as a means of atonement for the sin of their souls. Lord Wellesley abolished this wickedness.—(*Baptist Mission*, vol. i., p. 111.) Among some aboriginal tribes, a child is not unfrequently slain when the agricultural season is commencing, and the fields sprinkled with the blood of the innocent, to propitiate the earth god, in the expectation of procuring thereby an abundant harvest.

|| For a description of Hindooism, see Maurice's *Indian Antiquities*, in 7 vols. 8vo; Ward's *Mythology of the Hindoos*, 4 vols. 4to; Moor's *Hindoo Pantheon*; Coleman's *Mythology of the Hindoos*; Vans Kennedy's *Researches*; various volumes of the Asiatic Society; the *Asiatic Journal* of London; and the *Journal Asiatique* of Paris.

¶ For Buddhism, see the works of Upham and Hardy.

\*\* See the *Zendavesta*, or code of Zoroaster.

†† See Sale's *Koran*; and Taylor's *Mohammedanism*.

Mohammed; Seiks, attached to Nanik; \* Gonds, Koles, Bheels, Sonthals, Puharees, and other aboriginal tribes, distinct from all the preceding; Jews (white and black), Syriac, Armenian, and Latin Christians; representatives of the churches of England, Denmark, and Germany; Scotch Presbyterian, Baptist, Wesleyan, Congregational, and North American missions.† Each persuasion or sect would require one or more volumes for elucidation: all that is practicable, is a very brief description of the rise and progress of protestant missions in Hindoostan.

Christianity prevailed to some extent in India from an early date; but we have no certain knowledge of its introduction under the denomination of Syriac, or any other church.‡

The Portuguese, soon after their arrival, attempted the conversion of the Hindoos, with whom they were brought in contact, to the Romish form of Christianity, by jesuitism and the inquisition; and necessarily failed, as they did in China and in Japan. The Dutch, engrossed with commerce, made little or no attempt to extend the Calvinistic creed; the French were equally indifferent; but the King of

\* This reformer, at the beginning of the 16th century, attempted to construct in the Punjab a pure and peaceful system of religion out of the best elements of Hindooism and Mohammedanism: his followers (the Seiks) became devastating conquerors; and infanticide and other abominable crimes still fearfully prevail among this warlike race.

† See Hough's valuable *History of Christianity in India*, 4 vols. 8vo, 1839; Cox's *History of Baptist Missions*, 2 vols.; Pearson's *Lives of Dr. Claudius Buchanan* (2 vols.) and of *Schwartz*, 2 vols. 8vo; Arthur's graphic *Mission to the Mysoor*, 1 vol.; Duff on *India Missions*; Hoole's *Missions to South of India*; Pegg's *Orissa*, 1 vol.; *Memoir of W. Carey*; *Life of Judson*; and other interesting missionary works.

‡ Thomas Herbert, author of *Some Yeares Travels into divers parts of Asia and Afrique* (published in London in 1638, and who began his voyaging in 1626), speaks of there being Christians in many places; and refers especially to several maritime towns in Malabar. He says—"The Christians in these parts differ in some things from us, and from the Papacie yett retainne many principles of the orthodox and catholic doctrine: their churches are low, and but poorly furnished; their vassalage will reach no further, whether from their subjection, or that [so the temples of their bodies bee replenisht with vertue] the excellency of buildings conferre not holnesse I know not: neat they are, sweetly kept; matted, without seats, and instead of images have some select and usefull texts of holy writ obviously writ or painted. They assemble and haste to church each Lord's day with great alacrity: at their entering they shut their eyes, and contemplate the holiness of the place, the exercise they come about, and their own unworthiness: as they kuele they look towards the altar or table near which the bishop or priest is seated, whom they salute with a low and humble reverence, who returns his blessing by the uplifting of his hands and eyes: at a set hour they begin prayers, above two houres seldom continuing: first they have a short generall confession, which they follow the priest in, and assent in an uananim amen: then follows an exposition of some part or text of holy Scripture, during which their attention, dejected looks, and silence, is admirable; they sing an hymne," &c. Herbert then proceeds to observe that they have the Old and New Testaments; they baptize commonly at the fortieth day, if the parents do not sooner desire it; they observe two days' strict preparation for the holy communion, eating no flesh, and having no revelry; in the church they confess their sins and demerits with great reluctance: after the arrival of the Portuguese they shaved their heads. The clergy marry but once, the laity twice; no divorce, save for adultery. Lent begins in spring, is strictly ob-

Denmark, in the spirit of Lutheranism, encouraged, in 1706, the Tranquebar missionaries in their meritorious efforts to preach the gospel of Christ to the natives in the vernacular tongue; and for more than a century many devoted men, including Ziegenbalg, Schwartz, Gericke, Schultze, and others, laboured patiently in the south of India for the extension of the Divine mission of truth and peace; but failed, by permitting the intermingling of heathen customs with the purity of life which admits of no such toleration. The British church§ and government for many years made no response to appeals on behalf of Christianity. The latter was not merely negative or apathetic; it became positive and active, in resistance to the landing of missionaries in the territories under its control; and when, at the close of the 18th century, the Danish and other continental churches had almost retired in despair from the field, and the Baptists (under the leadership of Carey and Thomas) sought to occupy some of the abandoned ground, they and their able coadjutors, Marshman and Ward, were compelled to seek an asylum at the Danish settlement of Serampore, on the banks of the Hooghly, 15 m. above Calcutta.||

served for forty days; they "affect justice, peace, truth, humility, obedience," &c. When dead, the bodies are placed in the grave looking west towards Jerusalem, and they "believe no purgatory." St. Thomas is their acknowledged tutelar saint and patron.—(Lib. iii., on East Indian Christians, p. 304.'5.)

§ The E. I. Cy's. charter of 1698 directed ministers of religion to be placed in each "garrison and superior factory," and a "decent and convenient place to be set apart for divine service only:" the ministers were to learn the Portuguese and the native languages, "the better to enable them to instruct the Gentoos that shall be the servants or slaves of the said company, or of their agents, in the protestant religion." By the charter of 1698, the company were required to employ a chaplain on board of every ship of 500 tons' burthen. This regulation was evaded by hiring vessels, nominally rated at 499 tons, but which were in reality, by building measurement, 600 to 650 tons.—(Milburn, i., p. lvi.) Some clergymen of the Church of England were sent out to India from time to time; but with a few exceptions (whose honoured deeds are recorded by Hough in his *History of Christianity in India*), such men as Dr. Claudius Buchanan, Dr. Kerr, David Brown, Corrie, and Henry Martyn, had not many imitators: they "performed duty" on the sabbath; looked after money and other matters during the week; and, at the termination of their routine official life, returned to Europe with fortunes ranging from £20,000 to £50,000 each. Kiernander, the Danish missionary, mentions, in 1793, three of these misnamed ministers of the gospel (Blanshard, Owen, and Johnston), then about to return to England with fortunes of 500,000, 350,000, and 200,000 rupees each; which (Mr. Kaye observes) shows, according to their period of service, "an annual average saving of £2,500."—(*Hist. of Admn. of E. I. Cy.*, p. 630.)

|| During its early career the E. I. Cy. paid some attention to religion, and a church was built at Madras; but as commerce and politics soon absorbed all attention, the ministrations of religion were forgotten, and not inaptly typified by the fate of the church erected at Calcutta by pious merchants and seamen, who were freemasons, about the year 1716, when the E. I. Cy. allowed the young merchants £50 a-year "for their pains in reading prayers and a sermon on a Sunday." In October, 1737, a destructive hurricane, accompanied by a violent earthquake, swept over Bengal, and among damages, it is recorded that "the high and magnificent steeple of the English church sunk into the ground without breaking."—(*Gentleman's Magazine*, 1738.) Christianity certainly about this time sank out of sight in India, without being broken or destroyed, and it is now rising into pre-

The Marquis Wellesley gave encouragement to devout missionaries of every Christian persuasion;\* but during the administrations of Lord Minto and of the Marquis of Hastings, there was direct opposition to the ministers of the Cross, who were obliged to proceed from England to the United States, and sail in an American vessel to their destination. Some were prohibited landing on British ground, others were obliged to re-embark; ships were refused a port entrance if they had a missionary on board, as they were deemed more dangerous than the plague or the invasion of a French army: and the governor of Serampore, when desired by the Calcutta authorities to expel Drs. Carey, Marshman, and others, nobly replied,—they might compel him to pull down the flag of the Danish king, but he would not refuse a refuge and a home to those whose sole object was the temporal and spiritual welfare of their fellow-beings. Despite the most powerful official discountenance, the missionary cause ultimately triumphed. The Church of England became an effective auxiliary. Calcutta, in 1814, was made the see of a bishop, under Dr. Middleton; and his amiable suzerainty by the aid of that very E. I. Cy. who, a century ago, were so indifferent, and half a century since, so hostile to its introduction or discussion in Hindoostan. In 1805, the Rev. Dr. Claudius Buchanan, government chaplain at Calcutta, issued a *Memoir on the Expediency of an Ecclesiastical Establishment for British India, both as a means of perpetuating the Christian Religion among our own Countrymen, and as a foundation for the ultimate Civilisation of the Natives*. The memoir was dedicated to the Archbishop of Canterbury; and the appendix comprised a variety of instructive matter on the superstitions of the Hindoos. The work was in fact a forcible appeal to the Christians of Britain for the evangelisation of India, and was exceedingly well received by the bishops of London (Porteous), Llandaff (Watson), Durham, Exeter, St. David's, and other eminent divines. In India the memoir caused great excitement among that portion of the government who "viewed with sensitive alarm, for the security of our empire in the East, the circulation of the Word of God." (Hough, iv., 179.) Contrasts were drawn between Hindooism and Christianity, to the prejudice of the latter, by Europeans who still professed that faith; and in November, 1807, Dr. Buchanan memorialised the governor-general (Lord Minto), on the change of policy from that which the Marquis Wellesley had pursued. Among the points complained of were—*First*, withdrawing the patronage of government from the translation of the Scriptures into the Oriental languages; *secondly*, attempting to suppress the translations; *thirdly*, suppressing the encomium of the Court of Directors of the E. I. Cy. on the character and proceedings of the venerable missionary Schwartz; and *fourthly*, restraining the Protestant missionaries in Bengal from the exercise of their functions, and establishing an *imprimatur* for theological works. Sermons which Dr. Buchanan had delivered on the Christian prophecies, he was desired by the chief secretary to transmit to government for its inspection, which he properly declined to do. In 1813 several missionaries from different societies were ordered to quit India without delay; one in particular (Mr. Johns), was told if he did not take his passage *immediately*, he would be forcibly carried on board ship. Two members of the American board of missions, on arriving at Bombay, were ordered away by Sir E. Nepean, and directed to proceed to England; they left in a coasting vessel, landed at Cochin on their way to Ceylon, and were sent back to Bombay as prisoners. Sir E. Nepean was a religious man, and ultimately obtained permission for the missionaries to remain.

\* The opposition of the home authorities to the college of Fort William, which was founded by the Marquis Wellesley, had reference chiefly to the religious design of

cessor (Heber) removed many prejudices, and paved the way for a general recognition of the necessity and duty of affording to the people of India the means of becoming acquainted with the precepts of Christianity. The thin edge of the wedge being thus fairly inserted in the stronghold of idolatry, the force of truth drove it home; point by point, step by step, the government were fairly beaten from positions which became untenable. It was tardily admitted that some missionaries were good men, and did not intend or desire to overthrow the dominion of England in the East; next it was soon acknowledged that they had a direct and immediate interest in upholding the authorities, as the most effectual security for the prosecution of their pious labours. Soon after the government ceased to dismiss civil and military servants because they had become Christians; then came the public avowal, that all the Europeans in India had not left their religion at the Cape of Good Hope, on their passage from England, to be resumed on their return; but that they still retained a spark of the living faith, and ought no longer to be ashamed to celebrate its rites.† When the noble founder. Dr. Claudius Buchanan pointed out that it was a mistake to consider the sole object was merely to "instruct the company's writers." Lord Wellesley's idea, as Dr. Buchanan correctly states, was "to enlighten the Oriental world, to give science, religion, and pure morals to Asia, and to confirm in it the British power and dominion." The Doctor adds—"Had the college of Fort William been cherished at home with the same ardour with which it was opposed, it might, in the period of ten years, have produced translations of the Scriptures into all the languages from the borders of the Caspian to the Sea of Japan."—(Pearson's *Life of Dr. C. Buchanan*, i., 374.)

† The Rev. M. Thomason, father of the late excellent lieutenant-governor of the N. W. Provinces, was dismissed from the governor-general's (Earl Moira) camp, in June, 1814, because he remonstrated against "the desecration of the sabbath, and other improprieties of conduct."—(Hough, iv., 383.) At Madras, a collector (civil servant of high standing) was removed from the service for distributing tracts on Christianity among the natives. In Bombay, the state of Christianity at the commencement of the present century was indeed very low; immorality was general. Governor Duncan, a kind and benevolent man, rarely attended divine service; and the late lamented Sir Charles Forbes told me, that though educated in the sabbatical strictness of the Scotch kirk, the effect of evil example on youth carried him with the stream, and that Sunday was the weekly meeting of the "Bobby hunt" (a chase on horseback of jackals or pariah dogs), and its concomitant, drinking and other excesses. Henry Martyn, when visiting Bombay in 1811, on his way to Shiraz, speaking of the Europeans, says—"I am here amongst men who are indeed aliens to the commonwealth of Israel, and without God in the world. I hear many of those amongst whom I live bring idle objections against religion such as I have answered a hundred times." At the cantonments and revenue stations, marriages and baptisms were usually performed by military and civil servants. Many English officers never saw a church or minister of the gospel for years. Earnest representations for the erection of even small chapels were disregarded by the government, and the young cadets soon sank into drinking, debauchery, and vice. In 1807 not a Bible was to be found in the shops at Madras—it was not a saleable article; religious books were at a similar discount: the first purchasable Bible arrived in 1809. The observation of thoughtful old natives, for many years, on the English was—"Christian Man—Devil Man." If Charles Grant, who laboured so earnestly and effectively half a century for the introduction of Christian principles into India, were now alive, he would perceive that the above reproach



this vantage-ground was gained, other triumphs necessarily followed.\* The Scriptures, which the British and Foreign Bible Society, and also the Baptists, had been engaged in translating and printing, were now openly distributed. "Toleration" was no longer conceded only to Hindooism and other idolatries; it was extended to Christianity: and the principle was urged boldly, that the state should renounce all interference in the shameful orgies of Juggernaut and other Pagan abominations;—that the car of this idol and its obscene priests should cease to be annually decorated with scarlet cloth and tinsel, specially provided by the E. I. Cy.; and that the troops, English and Mohammedan, should no longer have their feelings outraged by being compelled to do honour to disgusting rites which were a mockery to the true and living God.†

The demoniac practice of *suttee* (widow-burning), was formidably assaulted by the missionaries and other good men. To sanction the crime of suicide was admitted to be repugnant to the character of a

to his countrymen was removed, and there would be found many co-operators in the evangelising work.

\* Up to 1851 the operations of the society, as regards India, were:—Sanskrit gospels and acts, 8,200; Hindoostanee Testament (*Roman*), 31,000; Urdu Persian portions of Old Testament, Urdu Persian gospels and acts, 82,000. *Northern and Central India*.—Bengallee portions of Old Testament, Bengallee and English St. Matthew and St. John, Bengallee Testament (*Roman*), Bengallee, with English Testament (*Roman*), 130,842; Uriya Bible, 16,000; Hinduwee Old Testament, 4,000; Harrottee Testament, 1,000; Bikaneera Testament, 1,000; Moultan Testament, 1,000; Punjabee Testament, 7,000; Cashmerian Testament, 1,000; Nepaulese Testament, 1,000; Sindhee St. Matthew, 500. *Southern India*—Telinga Testament, 33,000; Canarese Bible, 10,000; Tamil Bible, 105,000; Malayalim New Testament, Malayalim Old Testament, 32,065; Tulu Testament, 400; Kunkuna Testament, 2,000; Mahratta Testament, 30,000; Guzerattee Testament, 20,100; Cutchee St. Matthew, 500.

† In August, 1836, the Bishop of Madras, the clergy of every denomination, several civil and military servants, merchants, &c., addressed a memorial to the governor of Madras, the summary of which prayed, that in accordance with the instructions laid down by the Court of Directors, 28th February, 1833, guaranteeing toleration, but affording no encouragement to Mohammedan or heathen rites—"That it be not hereafter required of any Christian servant of the state, civil or military, of any grade, to make an offering, or to be present at, or to take part in, any idolatrous or Mohammedan act of worship or religious festival. That the firing of salutes, the employment of military bands, and of the government troops in honour of idolatrous or Mohammedan processions or ceremonies, and all similar observances which infringe upon liberty of conscience, and directly 'promote the growth and popularity of the debasing superstitions of the country,' be discontinued. That such parts of Regulation VII. of 1817, as identify the government with Mohammedanism and heathenism, be rescinded, and every class of persons left, as the honourable Court of Directors have enjoined, entirely to themselves, to follow their religious duties according to the dictates of their consciences." The governor (Sir Frederick Adam) administered to the bishop and to the memorialists a sharp rebuke, saying, he did not concur in their sentiments, which he viewed with "the deepest pain and concern," as they manifested the "zeal of over-heated minds," and that the "communication" (worded in a guarded and Christian spirit) "was fraught with danger to the peace of the country, and destructive of the harmony which should prevail amongst all classes of the community."—(Parl. Papers—Commons, No. 357; 1st June, 1837; p. 5.) The E. I. Cy. and her Majesty's government thought differently: the prayer of

professing Christian government, which had already forcibly suppressed infanticide; and notwithstanding many forebodings of danger, and considerable opposition by the enemies of missionaries,‡ self-murder was, on Dec. 4, 1829, during the administration of Lord William Bentinck, suppressed throughout British India, by a prohibitory edict of the supreme government; under which all persons aiding and abetting *suttee* were liable to the penalty inflicted for culpable homicide. There was not the slightest opposition to this ordinance throughout India.§ Widow-burning, however, still continues in several provinces which are not under our immediate government.

Many other advantages accrued from the course of Christian polity now fairly begun;—the government ceased to hold slaves, and passed a decree mitigating some of the evils of the system; churches were erected at the principal civil and military stations; and chaplains were appointed for the celebration of public worship at European stations.|| In 1831, bishoprics were founded at Madras and Bombay.

the memorialists was ultimately granted; and the peace of India and the harmony of its people was never for a moment disturbed. But previous to the final concession. Lieutenant-general Sir T. Maitland resigned the command of the Madras army rather than be a participator in offering honours to idols by sending the troops to assist at the Hindoo celebrations. Colonel Jacob, an old artillery officer, stated before the House of Commons' committee, 4th August, 1853, when referring to the attendance of British troops at idolatrous ceremonies—"I was myself in that position at Baroda, on the occasion of the Dusserah festival, when we were waiting for six hours in the sun at the beck and bidding of the Brahmins, who announced the fortunate hour, as they apprehended, for the Guicowar to go and sacrifice a fowl to the Dusserah. The whole of the force was under arms, and the British resident attended on the same elephant with the prince. Upon the Brahmins cutting off the head of the fowl, the signal was given, and I had to fire a salute." This Christian officer adds—"Within our own presidency, under the British flag, there can be no sort of excuse whatever for forcing British officers to take part in an heathen or idolatrous procession or worship, such as the cocoa-nut offerings, annually at Surat, by the governor's agent. At Madras, when I was there some years ago, the government sanction was directly given to idolatrous practices by presenting offerings of broadcloth to the Brahmins, for them to pray to the idol deity to save the Carnatic from invasion."—(Parl. Papers—Commons; 6th August, 1853; p. 151.)

‡ The Brahmins, who had originated *suttee* to prevent their widows remarrying, declared it was a religious rite, and on this ground several English functionaries objected to its forcible suppression; but the doctrine laid down by Menu, the great Hindoo lawgiver, does not sustain the assertion. The texts referring to the subject run thus:—"A faithful wife, who wishes to attain in heaven the mansion of her husband, must do nothing unkind to him be he living or dead. Let her emaciate her body by living voluntarily on pure flowers, roots, and fruits; but let her not, when her husband is deceased, even pronounce the name of another man. Let her continue until death forgiving all injuries, performing harsh duties, avoiding every sensual pleasure, and cheerfully practising the incomparable rules of virtue which have been followed by such women as have been devoted to one only husband."

§ I was happily enabled to be of some use in preparing the public mind for this great event by writing articles on the subject, and addressing them, when translated into different languages, to the Hindoo population.

|| Until recently the spirit under which the Anglo-Indian government was administered, was the protection and encouragement of Brahmminism and Mohammedanism, and the disavowal of any connection with Christianity. Thus, as

Gradually the state, so far as is alleged to be compatible with pledged faith, ceased to interfere in the temporal concerns of idolatrous shrines; the forfeiture of property by Hindoos who had become converts to Christianity, was no longer recognised as the law; native Christians became equally eligible with their fellow-citizens to public offices. Finally, several of the highest functionaries have openly avowed, that the best means for effecting an improvement in even the physical condition of the people, is by the diffusion of Christianity; and that the main-

stay for the security of British dominion in India, is the inculcation and practice of its divine precepts. Such are the glorious results of nearly half a century\* spent in peaceful but unceasing efforts on behalf of truth; and I now proceed to show the means in operation for continuing the great work which has been so signally blessed in its course. The following data show the state of the Church of England establishment,† and that of the principal protestant missions in India, at the present period:—

Tabular View of the Church Missionary Society's Operations—1855.

Principal Stations.	Churches, Preaching-places, &c.	Ordained Missionaries.		Lay Teachers, &c.					Grand Total of Labourers.	Native Christians.	Communicants.	Seminaries and Schools.	Scholars.			Printing Establishments.	
		Europeans.	East Indian and Native.	European, Male and Female.	East Indian and Country-born.	Natives.		Total.					Male.	Female.	Total.		
						Catechists & Readers.	School Teachers.										
<b>BOMBAY &amp; W. INDIA</b>	++																
Bombay . . . . .	—	5	1	2	2	1	11	16	22	64	12	22	1,354	236	1,590	—	
Nasik . . . . .	—	3	—	—	—	2	—	2	2	78	17	5	177	16	193	—	
Junir and Malligaum . . . . .	—	1	2	—	—	1	—	1	4	45	19	4	179	—	179	—	
Sinde mission . . . . .	—	3	1	1	—	—	—	1	5	14	4	2	34	—	34	—	
<b>CALCUTTA &amp; N. INDIA</b>	++																
Calcutta . . . . .	—	4	—	1	1	13	26	41	45	716	181	15	1,220	59	1,279	—	
Burdwan district . . . . .	—	2	—	—	1	3	21	25	27	206	51	9	586	50	636	—	
Krishaghurh dist. . . . .	—	9	—	3	—	31	95	129	138	5,069	465	62	3,558	508	4,066	—	
Bhagulpoor . . . . .	—	1	—	—	1	3	5	9	10	105	29	4	160	150	310	—	
Benares . . . . .	—	5	—	1	1	5	31	38	43	321	91	3	589	—	589	—	
Jaunpoor . . . . .	—	1	—	1	—	2	19	22	23	22	9	5	467	32	499	—	
Gorruckpoor . . . . .	—	3	—	—	—	5	14	19	22	217	30	3	100	117	217	—	
Jubbulpoor . . . . .	—	—	—	1	—	—	1	2	2	—	—	1	—	6	6	—	
Agra . . . . .	—	4	—	2	3	7	24	36	40	544	173	11	538	67	605	—	
Meerut . . . . .	—	3	—	1	—	6	7	14	17	247	99	7	226	17	243	—	
Himalaya . . . . .	—	2	—	—	—	2	9	11	13	21	11	7	111	15	126	—	
Punjab mission . . . . .	—	3	1	—	—	3	3	6	10	50	20	2	45	7	52	—	
Peshawur . . . . .	—	2	—	1	—	—	—	1	3	—	—	—	—	—	—	—	
<b>MADRAS &amp; S. INDIA</b>																	
Madras . . . . .	4	2	3	2	3	4	20	29	34	606	199	12	279	297	576	—	
Tinnevely dist. . . . .	353	14	7	7	4	187	378	576	597	27,920	3,565	327	5,131	3,020	8,151	1	
Travancore district . . . . .	25	9	2	2	—	36	95	133	144	5,007	1,242	83	1,802	442	2,244	1	
Teluga mission . . . . .	2	3	1	—	2	1	24	27	31	131	14	5	76	143	219	—	
<b>Totals . . . . .</b>	<b>384</b>	<b>79</b>	<b>18</b>	<b>25</b>	<b>18</b>	<b>312</b>	<b>783</b>	<b>1,138</b>	<b>1,235</b>	<b>41,373</b>	<b>6,231</b>	<b>589</b>	<b>16,632</b>	<b>5,182</b>	<b>2,1814</b>	<b>2</b>	

‡ No returns.

stated by the Rev. J. Lechman, in his evidence before parliament (8th August, 1853), "the government have maintained for thirty years an institution for the instruction of its Mohammedan subjects in their creed, but has not maintained any college or school for the exclusive instruction of its Christian subjects."

\* The Rev. W. Mullens thus sums up the progress of missions during the present century:—"Within a few years stations were established in Calcutta, Madras, and Bombay, and began to push outward into all the presidencies of Hindoostan. The beginnings were slow but sure. One society, then another—one missionary and then another, landed on the coast, and took up their posts on the great battle-field of idolatry. The London Missionary Society sent missionaries to Chinsurah, to Travancore, to Madras, Vizagapatam, Bellary, and to Surat. The American board, after some opposition from the government, occupied Bombay. The Church Missionary Society entered first on the old missions at Madras, Tranquebar, and Palamcottah; but soon began an altogether new field among the Syrian Christians in West Travancore. They planted a station at Agra, far

in the north-west, and maintained the agency which Corrie had employed at Chunar. A native preacher began the work at Mecrut, while two missionaries were stationed in Calcutta. The Baptist Missionary Society soon occupied Jessore, Chittagong, Dinagapore, and other places. The Wesleyans speedily obtained a footing in Mysoor; and to them succeeded the missionaries of the American board. North, south, east, and west, the Church of Christ was pushing forth its men and means into the land with vigour and earnestness of purpose." There is much wanting for India a *Medical Missionary Society*, similar in its working to the institution (composed of Americans and British) under this title which is now accomplishing so much good in China.

† There is a large Roman catholic establishment consisting of bishops, vicars-general, and inferior clergy, not only at Goa and Pondicherry, but also at the British stations: their number is alleged to have been, in 1853, about 303, of whom 200 were Europeans; and of these forty are British. The Roman catholic community throughout India is estimated at 690,000, exclusive of about 16,000 soldiers.

**ECCLESIASTICAL ESTABLISHMENTS—BENGAL, MADRAS, BOMBAY. 533**

*Statement showing the Number and Expense of the Ecclesiastical Establishments under each Presidency, in the Year 1832-'33, and in 1851-'52.*

1832-'33.		1851-'52.	
<b>BENGAL :—</b>		<b>BENGAL :—</b>	
1 Bishop . . . . .	S. Rupees. 43,103	1 Bishop . . . . .	Cos. Rupees. 45,977
1 Archdeacon . . . . .	17,241	1 Archdeacon (also a Chaplain) . . . . .	3,200
2 Senior Chaplains . . . . .	26,724	2 Senior Chaplains . . . . .	27,912
35 Chaplains . . . . .	317,606	19 Chaplains, at 9,600 francs each . . . . .	1,82,400
2 ditto (at Straits settlements) . . . . .	18,372	40 Assistant Chaplains, at 6,000 francs each . . . . .	2,40,000
1 Officiating ditto . . . . .	2,871	2 ditto ditto at 9,600 (stational in Straits settlements) . . . . .	19,200
Visitation and travelling allowances, establishment, and contingencies . . . . .	54,908	Visitation and travelling allowances, establishment, & contingencies in 1849-'50 . . . . .	47,761
<b>Total church establishment . . . . .</b>	<b>480,825</b>	<b>Total church establishment . . . . .</b>	<b>5,66,450</b>
<b>Scotch Kirk—</b>		<b>Scotch Kirk—</b>	
2 Chaplains . . . . .	22,414	2 Chaplains . . . . .	23,112
<b>Roman Catholic—</b>		<b>Establishment . . . . .</b>	<b>576</b>
Allowance to priests at Straits settlements . . . . .	5,254	<b>Total Scotch Kirk . . . . .</b>	<b>23,688</b>
<b>Total Bengal . . . . .</b>	<b>508,493</b>	<b>Roman Catholic—</b>	
<b>MADRAS :—</b>		Allowance to priests . . . . .	21,840
1 Archdeacon . . . . .	Ms. Rupees. 19,091	<b>Total Bengal Rs. . . . .</b>	<b>6,11,978</b>
2 Senior Chaplains . . . . .	26,160	<b>MADRAS :—</b>	
21 Chaplains, at 7,875 rupees each . . . . .	165,375	1 Bishop . . . . .	25,600
Travelling allowances, establishment, and contingencies . . . . .	32,576	1 Archdeacon (also a Chaplain) . . . . .	3,200
<b>Total church establishment . . . . .</b>	<b>243,202</b>	2 Senior Chaplains . . . . .	26,160
<b>Scotch Kirk—</b>		9 Chaplains, at 8,400 rupees each . . . . .	75,600
2 Chaplains . . . . .	19,635	18 Assistant Chaplains, at 6,000 rupees each . . . . .	1,08,000
<b>Establishment . . . . .</b>	<b>1,050</b>	Visitation and travelling allowances, establishment, and contingencies . . . . .	50,460
<b>Total Scotch Kirk . . . . .</b>	<b>20,685</b>	<b>Total church establishment . . . . .</b>	<b>289,020</b>
<b>Roman Catholic—</b>		<b>Scotch Kirk—</b>	
Allowance to priests . . . . .	5,744	2 Chaplains . . . . .	19,635
<b>Total Madras . . . . .</b>	<b>252,889</b>	<b>Establishment . . . . .</b>	<b>1,323</b>
	{ Ms. Rs. 269,631	<b>Total Scotch Kirk . . . . .</b>	<b>20,958</b>
	{ Sco. Rs. 252,889	<b>Roman Catholic—</b>	
<b>BOMBAY :—</b>		Allowance to priests . . . . .	10,320
1 Archdeacon . . . . .	By. Rupees. 17,778	<b>Total Madras Rs. . . . .</b>	<b>3,20,298</b>
2 Senior Chaplains . . . . .	28,560	<b>BOMBAY :—</b>	
13 Chaplains . . . . .	104,000	1 Bishop . . . . .	25,600
Travelling allowances, establishment, and contingencies . . . . .	36,647	1 Archdeacon (also a Chaplain) . . . . .	3,200
<b>Total church establishment . . . . .</b>	<b>186,985</b>	2 Senior Chaplains . . . . .	26,160
<b>Scotch Kirk—</b>		5 Chaplains, at 8,400 rupees each . . . . .	42,000
2 Chaplains . . . . .	20,382	16 Assistant Chaplains, at 6,000 rupees each . . . . .	96,000
<b>Establishment, &amp;c. . . . .</b>	<b>1,389</b>	Visitation and travelling allowances, establishment, and contingencies . . . . .	30,127
<b>Total Scotch Kirk . . . . .</b>	<b>21,771</b>	<b>Total church establishment . . . . .</b>	<b>223,087</b>
<b>Roman Catholic—</b>		<b>Scotch Kirk—</b>	
Allowance to priests . . . . .	4,440	2 Chaplains . . . . .	20,160
<b>Total Bombay . . . . .</b>	<b>202,158</b>	<b>Establishment . . . . .</b>	<b>948</b>
	{ By. Rs. 213,196	<b>Total Scotch Kirk . . . . .</b>	<b>21,144</b>
	{ Sco. Rs. 202,158	<b>Roman Catholic—</b>	
<b>Grand Total . . . . .</b>	<b>963,540</b>	Allowance to priests . . . . .	22,800
	cr £ stg. 96,354	<b>Total Bombay Rs. . . . .</b>	<b>2,67,031</b>
		<b>Grand Total . . . . .</b>	<b>11,99,307</b>
			or £ 112,435

*Abstract.*

Years.	Church Establishments.		Scotch Kirk.		Roman Catholic.	Total.
	No. of Persons.	£	No. of Persons.	£	£	£
1832-'33	82	88,623	6	6,246	1,485	96,354
1851-'52	118	101,114	6	6,168	5,153	112,435

Tabular View of the Wesleyan Missions—1855. —The \* indicates that there are no returns obtainable.

Principal Stations	Chapels	French- ing places.	Missionaries & Assistants	Subordinate paid Agents.		Unpaid Agents.		Acre- dited Church Members.	On trial for Mem- bership.	Sabbath Schools, both sexes.	Day- Schools.	Day Scholars of both sexes.	Scholars, deducting for those who attend both Sabbath and Week-day Schools.			Attend- ants on Public Worship.	Printing Establi- shments
				Catechists &c.	Day- School Teachers.	Sabbath School Teachers.	Local Preachers.						Males.	Females.	Total.		
Madras . . . . .	4	3	4	*	*	*	189	—	3	205	4	250	170	80	250	*	—
Negapatam . . . . .	2	6	2	*	*	*	14	6	—	—	3	101	101	—	101	*	—
Trichinopoly . . . . .	3	4	4	*	*	*	39	6	—	—	1	165	95	70	165	*	—
Bangalore . . . . .	2	—	2	2	13	4	143	6	1	64	2	682	*	*	210	1	—
Mysor . . . . .	1	—	2	—	3	—	6	2	—	—	1	150	*	*	150	34	—
Goobbee and Toorn- koor . . . . .	1	—	—	1	3	—	—	—	—	—	1	211	*	*	211	20	—
Coonghul . . . . .	1	1	1	—	2	—	17	—	—	—	2	93	*	*	93	10	—
Total . . . . .	14	14	15	3	21	4	408	14	4	269	14	1,655	*	*	1,655	*	1

Statistics of Mission Churches, connected with the Baptist Missionary Society — 1855.

Years	Name of Stations	Paid Teachers.	Unpaid Teachers.	Increase during the year.			Decrease during the year.			Total Members.	Candi- dates.	Attend- ance at Public Worship.	Day-Schools.		Sabbath Schools.			
				Baptized.	Restored.	Received by Dismission.	Died.	Dismissed, etc.	Exclud.				En- o-peans.	Natives.	Attend- ance.	Number.	Attend- ance.	Number.
1808	Circular Road .	—	—	2	—	7	—	—	—	102	—	—	—	2	100	—	—	65
1809	Lal Bazaar . . .	—	—	1	—	2	—	—	—	120	—	—	—	2	100	—	—	50
1818	Haurah . . . . .	2	—	3	—	—	—	—	—	—	—	—	—	2	100	—	—	50
1822	Colingah, South	—	—	—	—	—	—	—	—	—	—	—	—	3	126	—	—	—
1833	Inally, South Rd.	—	—	—	—	—	—	—	—	—	—	—	—	1	20	—	—	—
1824	Narsigdarchoke	—	—	1	—	—	—	—	—	—	—	—	—	1	40	—	—	—
1850	Eshapore . . . .	—	—	4	—	—	—	—	—	—	—	—	—	1	37	—	—	—
1829	Khari . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	1	40	—	—	—
1830	Lakhyantipore .	—	—	—	—	—	—	—	—	14	—	—	—	1	37	—	—	—
—	Dum Dum . . . .	—	—	1	—	—	—	—	—	—	—	—	—	1	40	—	—	—
1842	Malayapur . . .	—	—	15	—	3	—	—	—	—	—	—	—	3	600	—	—	—
1799	Serampore . . . .	—	—	—	—	—	—	—	—	—	—	—	—	1	12	—	—	—
1804	Cutwa . . . . .	1	—	—	—	—	—	—	—	—	—	—	—	5	267	—	—	—
1804	Jessore . . . . .	4	—	3	—	—	—	—	—	7	—	—	—	2	120	—	—	—
1805	Dunajpore . . . .	6	—	2	—	—	—	—	—	9	—	—	—	5	40	—	—	—
1816	Dacca . . . . .	5	—	3	—	—	—	—	—	4	—	—	—	4	150	—	—	—
1818	Sewry . . . . .	5	—	1	—	—	—	—	—	4	—	—	—	11	239	—	—	—
1828	Barisal . . . . .	2	—	25	—	—	—	—	—	4	—	—	—	2	20	—	—	—
1812	Chittagong . . . .	10	—	4	—	—	—	—	—	4	—	—	—	3	110	—	—	—
1815	Mongdur . . . . .	6	—	4	—	—	—	—	—	4	—	—	—	2	20	—	—	—
1817	Benares . . . . .	22	—	4	—	—	—	—	—	8	—	—	—	3	125	—	—	—
1834	Agra . . . . .	—	—	5	—	—	—	—	—	2	—	—	—	4	461	—	—	—
—	Native church	—	—	—	—	—	—	—	—	—	—	—	—	1	150	—	—	—
1842	Muttra . . . . .	—	—	—	—	—	—	—	—	—	—	—	—	2	62	—	—	—
1849	Chitoura . . . . .	—	—	8	—	—	—	—	—	—	—	—	—	5	140	—	—	—
1851	Caunipoor . . . .	—	—	—	—	—	—	—	—	—	—	—	—	1	32	—	—	—
1853	BOMBAY—Poona .	1	—	—	—	—	—	—	—	7	—	—	—	2	48	—	—	—
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OPERATIONS OF CHRISTIAN BRITAIN IN INDIA—RESULTS. 535

Statistics of the London Missionary Society's Stations—1855.

Com- menced.	Stations.	Missionaries (in addition to nearly 300 Native Agents.)	Worship- pers.*	Communi- cants.	Schools.	Scholars.	Printing Presses.
	NORTHERN INDIA :—						
1816	Calcutta . . . . .	7	800	210	6	1,089	—
1824	Berampore . . . . .	2	96	30	3	144	—
1819	Benares . . . . .	4	59	20	7	524	—
1838	Mirzapoor . . . . .	3	97	14	8	531	1
1850	Almorah . . . . .	1	—	—	4	144	—
1845	Mahi Kantha (near Baroda) . . . . .	2	120	20	1	30	—
	PENINSULAR INDIA :—						
1805	Madras . . . . .	3	400	110	15	1,404	—
1852	Tripassore . . . . .	1	—	40	9	300	—
1805	Vizagapatam . . . . .	3	100	40	2	256	1
1852	{ Vizianajaram (including Chica- cole . . . . . )	2	—	22	6	296	—
1822	Cuddapah . . . . .	2	700	60	18	450	—
1820	Belgaum . . . . .	1	180	33	9	410	—
1810	Bellary . . . . .	4	154	55	11	351	1
1820	Bangalore . . . . .	5	—	84	12	587	—
1827	Salem . . . . .	1	287	44	7	213	—
1836	Coimbatoor . . . . .	2	300	45	14	854	—
	SOUTH TRAVANCORE :—						
1819	Nagercoil . . . . .	4	8,247	601	93	3,856	1
1829	Neyoor . . . . .	1	2,768	39	44	1,209	1
1838	Pareychaley . . . . .	1	1,335	98	61	1,891	—
1838	Trevandrum (including Quilon)	1	1,514	82	17	586	—

\* The numbers in this column represent the nominal converts; but do not include the heathen, whose numbers, by reason of the irregularity of their attendance on the public services, cannot be reported.

In the beginning of 1852, the number of native Christian churches in India (including Ceylon), was 331; of recorded members (communicants), 18,401; and of worshipping Christians, 112,191: number of missionaries (including forty-eight ordained natives), was 443, together with 598 native catechists belonging to twenty-two missionary societies, who have established 1,347 vernacular day-schools, 93 boarding, 347 day-schools for girls, 120 girls' boarding-schools, 126 superior English schools, throughout the country (see Mission returns.) There are eight Bible societies in India, which published, in 1850, no less than 130,000 copies of the Bible, or selections from it, in thirteen languages, and distributed 185,400 copies. There are also fifteen tract societies engaged in supplying works for native Christians—short tracts, or expositions of Bible truth, and school-books for missionary schools. The entire Bible has been translated into ten languages, the New Testament into five others, and separate gospels into four other languages; besides numerous works of Christians;—thirty, forty, and even seventy tracts, suitable for Hindoos and Mussulmen, have been prepared in the vernacular. The missionaries maintain twenty-five printing establishments. The cost of all these operations, for 1851, was £190,000, of which £33,540 was contributed by European Christians in India itself.†

This is but a very small beginning of the great work to be accomplished by philanthropists of all classes; the *Urgent Claims of India for more Christian Missions*† has been forcibly set forth by Mr. Muir, of the Bengal civil service: he shows that some of the fairest portions of India have no missionary; that others are supplied in the proportion of one to one million people;—a “long range of fertile,

† *Results of Missionary Labour in India*, by Rev. W. Mullens; reprinted from *Calcutta Review*, October, 1851. London: Dalton, Cockspur-street

‡ Published by Dalton, Cockspur-street, London.

populous countries as much neglected as if they were districts of Japan.”—(p. 12.) Formerly the Hindoos would not listen to the missionaries; now they attend to hear, discuss, and dispute: and, what is still better, they *buy* the books issued from the mission presses, in large quantities.‡ Undoubtedly there is a great change coming over the Indian population, especially of the educated class: the little leaven is fomenting the vast mass. Idolatry cannot long stand before truth, when presented in the manner in which its Divine Founder explained it to His disciples; but the unbeliever must be born again before he can see God,—he must be born of water and of the Spirit before he can dwell with Him. The Hindoo is as yet only born of the earth—earthly, with every corruption of our nature in its pristine strength; he is also surrounded and entangled by the meshes of a Satanic system, from which he cannot extricate himself. It seems to be a part of the Divine scheme for man's redemption, to make his fellow-man an instrument in the work of regeneration; for thus both the giver and receiver of good are blessed. Hence, to human eyes, the operation appears slow. But we cannot penetrate the designs of Omnipotence. We cannot tell why millions of Hindoos have been left steeped in the mire of idolatry for ages, and that they should now be raised from darkness into light by a handful of men from the remote isles of the western world; all this, and much more, is a mystery: but may not this singular communion between England and India be as much for the benefit of the former as for that of the latter? May not Britain need, nearly as much as Hindoostan, not only the quickening influence which is able to save and make wise, but also the renovation of the flickering flame of celestial

‡ These are not solely religious tracts. For instance, at the Wesleyan press in Bangalore, *Robinson Crusoe* has been printed in the vernacular language, with woodcuts: it has an extensive sale.

life, which, until the last few years, burnt dim and fitful here, and needed kindling into a bright and cheering light,—a light whose expanding, vivifying rays may, ere long, spread to the darkest and remotest corners of our globe? Be this as it may, the Anglo-Indian Christian mission is now fairly commenced; a wide and encouraging prospect is open for its meritorious labours. In a mere worldly point of view, an extension of operations is of the utmost importance. Every Hindoo or Moslem converted to the gospel of peace, is an additional security for the permanence of British power. Mere secular men ought therefore to aid this great cause. The day is past in England for attempting to rule a nation by brute force, as if men were beasts of burthen or irreclaimable maniacs. Kindness, consideration, and reasoning, are the instruments of conversion which the missionaries employ, and they are happily in accordance with the dictates and policy of government. There is therefore, in a new sense, a union between church and state in India, devoid of patronage or pecuniary relations, but based on the principle that what is good for the spiritual, must be equally good for the temporal interests of the people.

EDUCATION.—Under both the Hindoo and Moslem governments, the education of the people was, at various times, deemed a matter of public importance; many of the temples now devoted to idolatry and paphian rites, were originally schools and colleges for instruction, endowed with lands for this purpose, and conducted somewhat after the manner of the monastic institutions of Europe: but in both regions the teaching of the young fell into desuetude. The setting apart of a body of men as more sacred than their fellow-mortals,—investing them with peculiar privileges,—furnishing them in abundance with not only the necessities, but also the luxuries of life, for which they were not required to labour,—enjoining celibacy,—and placing them under an ecclesiastical, instead of a civil law applicable to all,—was as pernicious to the scholastic system of Hindoos and Mohammedans as it was to that of the Latins: the funds allocated for the temples and mosques became appropriated solely to the use of a lazy, sensual priesthood; the minds as well as the morals of the people were neglected; and but for the village schools, sustained by each little agricultural community, and the town seminaries, supported by paying pupils, the people of Hindoostan would not even have had the primary elements of reading, writing, and arithmetic, which we found to prevail pretty general among the better classes of the community.

For a considerable period, the Anglo-Indian authorities gave no thought to the subject. In 1781, a Mohammedan madriisa (college) was established at Calcutta, under the patronage of Warren Hastings; and in 1792 a Sanscrit college was founded at Benares by Jonathan Duncan; but the main idea in connexion with these institutions—with the Hindoo college at Calcutta, founded in 1816; colleges at Agra and Delhi, in 1827; and a few seminaries in various provincial towns—was the propagation of *Oriental* literature, and the inculcation of the Hindoo and the Mohammedan religion. The extension of the English language, and of the arts and sciences,

of which it might become the medium, was an innovation; and as such, dreaded by those whose opinions then ruled. A watchmaker at Calcutta, David Hare, about 1823-'4, established a British school there: he saw that the efficacy of Lord Wellesley's policy in founding the college at Fort William, as a means of incorporating the English on the Asiatic stock, was sound, and that no material improvement could take place in the mass of the people by endeavouring to communicate knowledge through twenty different tongues instead of by one, which would form a common medium of intercourse for all. The thought began to be "ventilated"—some advocating the English, some the vernacular, some both. The latter was partially adopted, as a compromise between the two former systems: but it ultimately gave way;\* and now sound-thinking Indian statesmen are convinced that the foundation of education ought to be the English, whatever may be the vernacular; so that in due time it may become the ordinary dialect of about 200,000,000 in Hindoostan.

In 1813, attention was directed to the necessity of something being done towards the education of the people; and under the then charter act it was decreed that a lac of rupees (£10,000) should be annually appropriated out of the revenue of India for the "revival and improvement of literature."† It was a small sum for such an object: yet it remained unemployed for ten years; and then the accumulated funds were appropriated to the Hindoo college at Calcutta, which was placed under the superintendence of government, and to such other Oriental seminaries as a Committee of Public Instruction (appointed in 1823) might recommend.

The Court of Directors early foresaw the inefficiency of mere Oriental literature as a means of improving the people. In a despatch to India, written in 1821, the Court warned the local governments thus:—"In teaching mere Hindoo or Mohammedan learning, you bind yourselves to teach a great deal of what is frivolous, not a little of what is purely mischievous, and a small remainder indeed in which utility is in any way concerned." Bishop Heber also justly remarked—"The Mussulman literature very nearly resembles what the literature of Europe was before the time of Copernicus, Galileo, and Bacon. The Mussulmans take their logic from Aristotle, filtered through many successive translations and commentaries; and their metaphysical system is professedly derived from Plato. Both Mohammedans and Hindoos have the same natural philosophy, which is also that of Aristotle in zoology and botany, and Ptolemy in astronomy, for which the Hindoos have forsaken their more ancient notions of the seven seas and the six earths." The Court of Directors had to contend against the prejudices of distinguished Englishmen, who clung pertinaciously to the idea of educating the people in the Oriental tongues. Thus, in a despatch of September 29th, 1830, the Court says—"We think it highly advisable to enable and encourage a large number of natives to acquire a thorough knowledge of English, being convinced that the high tone and better spirit of European literature can produce their full effect only on those who become familiar with them in the original lan-

\* The Right Honourable T. B. Macaulay deserves credit for the efforts he made in favour of the extension of the English language in India.

† Parl. Papers on India, submitted by E. I. Cy. in 1853.

‡ Of the course of education in this institution, that

accurate observer the late Rammohun Ray, said—"It can only load the minds of youth with grammatical niceties and metaphysical distinctions of no practical use; the pupils will acquire what was known 2,000 years ago, with the addition of vain and empty subtleties." In fact, its pupils became deists and atheists.

guage. While, too, we agree that the higher branches of science may be more advantageously studied in the languages of Europe, than in translations into the Oriental tongues, it is also to be considered, that the fittest persons for translating English scientific books, or for putting their substance into a shape adapted to Asiatic students, are natives who have studied profoundly in the original works."—(Despatch, September 29th, 1830.)

These sound views were not immediately adopted by the Indian government, who absurdly persevered for several years attempting to instruct the people who attended the public seminaries by translating English literature into Sanscrit and Arabic—the one not spoken, and the other a foreign language in India. Before a Hindoo could study the best masters in English, he must waste precious time in becoming an Oriental scholar: in effect, it would be paralleled if boys in the national schools of Britain were required to learn Latin and Greek, and then study English literature from translations into these

languages. The pedantry and inutility of such a system was at length exposed; and, with broader views of statesmanship, there came a recognition of the necessity of making English the classical and predominant language.

On the 7th of March, 1835, the government abandoned the Oriental scheme of education, and the comprehensive and adaptative tongue of the ruling power was gradually substituted by attaching English classes to the Hindoo and Mohammedan colleges which had been established in different cities; to these were added scholarships, with stipends attainable after a satisfactory examination, and terminable at a central college to which the school was subordinate. In October, 1844, government passed a resolution, promising preference of selection for public employment to students of distinguished ability. Model schools have been adopted in several districts; suitable books prepared; an organised system of inspection maintained;\* and Christian instruction thus extended:—

*Missionary Schools in Continental India.*

Stations.	Male.						Female.			
	Vernacular Day-Schools.		Boarding-Schools.		English Schools.		Day-Schools.		Boarding-Schools.	
	Schools.	Boys.	Schools.	Boys.	Schools.	Boys.	Schools.	Girls.	Schools.	Girls.
Bengal, Orissa, and Assam	127	6,369	21	761	22	6,054	26	690	28	836
N. W. Provinces . . .	55	3,078	10	209	16	1,207	8	213	11	208
Madras Presidency . . .	852	61,366	32	754	44	4,156	222	6,929	41	1,101
Bombay Presidency . .	65	3,548	4	64	9	984	28	1,087	6	129
Total . . . . .	1,099	74,661	67	1,788	91	12,401	284	8,919	86	2,274

In the parliamentary discussions relative to India, in 1852-'3, the subject of educating the people by a general system, was fully recognised as one of the most important duties of government; and accordingly, in July, 1854, an admirable despatch was forwarded to Bengal by the home authorities.† In this document the Court of Directors declare that "no subject has a stronger claim to attention than education;" and that it is "one of our most sacred duties, to be the means, as far as in us lies, of conferring upon the natives of India those vast moral and material blessings which flow from the general diffusion of useful knowledge, and which India may, under Providence, derive from her connexion with England. For although British influence has already, in many remarkable instances, been applied with great energy and success to uproot demoralising practices, and even crimes of a deeper dye, which for ages had prevailed among the natives of India, the good results of those efforts must, in order to be permanent, possess the further sanction of a general sympathy in the native mind, which the advance of education alone can secure. We have, moreover, always looked upon the encouragement of education as peculiarly important, because calculated 'not only to produce a higher degree of intellectual fitness, but to raise the moral character of those who partake of its advantages, and so to supply you with servants to whose probity you may with increased confidence commit offices of trust' in India,

\* In September, 1845, I attended an annual examination of the Poona schools, and was agreeably surprised by the intelligence and proficiency of the pupils.

where the well-being of the people is so intimately connected with the truthfulness and ability of officers of every grade in all departments of the state. Nor, while the character of England is deeply concerned in the success of our efforts for the promotion of education, are her material interests altogether unaffected by the advance of European knowledge in India: this knowledge will teach the natives of India the marvellous results of the employment of labour and capital, rouse them to emulate us in the development of the vast resources of their country, guide them in their efforts, and gradually, but certainly, confer upon them all the advantages which accompany the healthy increase of wealth and commerce; and, at the same time, secure to us a larger and more certain supply of many articles necessary for our manufactures and extensively consumed by all classes of our population, as well as an almost inexhaustible demand for the produce of British labour."

These are noble sentiments, worthy of England, and of incalculable benefit to India. With this preamble, the Court of Directors proceed to state the main object thus:—"We emphatically declare that the education which we desire to see extended in India is that which has for its object the diffusion of the improved arts, science, philosophy, and literature of Europe; in short, of European knowledge."

Pecuniary aid is to be given to vernacular and Anglo-vernacular schools. The study of law, medi-

† It is understood that the preliminary draft of this valuable State Paper was drawn up by Sir Charles Wood, then president of the India Board.

chine,\* and civil engineering to be encouraged; and all the higher branches of sound education. The expenditure for these great designs will be large, and can only gradually be employed: at present it amounts to about £150,000 a-year, which, it is to be hoped, will ere long be largely augmented.†

Number of Government Educational Institutions, of Teachers and of Pupils therein, with the total Expense thereof, and the Number and Value of Scholarships in each Presidency, in the Year 1852-'53.

Presidency.	Nature of Institution.	Institutions.	Teachers	Pupils.	Expense.	Scholarships.	
						Number.	Value.
Bengal	English and native tuition . . . . .	109	336	9,116	£ 51,000	152	£ 3,137
	Vernacular tuition . . . . .	36	36	1,904	1,192	—	—
	Grants in aid to charitable and other scholastic institutions . . . . .	—	—	—	6,306	—	—
N W. Provinces	English and native tuition . . . . .	7	125	1,835	14,577	284	2,814
	Vernacular . . . . .	8	—	—	5,437	—	—
Madras	English and native tuition . . . . .	3	21	448	3,789	—	—
	Vernacular . . . . .	—	—	—	766	—	—
Bombay	English and native tuition . . . . .	15	64	2,492	17,143	84	5,880
	Vernacular . . . . .	235	190	12,384			
Total . . .	{ English and native tuition . . . . .	134	546	13,891	—	520	11,831
	{ Vernacular . . . . .	279	226	14,288	—	—	—
Grand Total . . . . .		413	772	28,179	100,210	520	11,831

Note.—The above return is founded on the information received for the year 1852-'53; but as the state of education in India is at present one of transition, it is probable that considerable alteration has taken place. By the despatch to the government of India, dated the 19th July (No. 49 of 1854), a plan for the general extension of education was laid down, and when the instructions therein contained shall begin to be carried out, the changes made will be of a wide and sweeping character. For the reasons already assigned it is impossible to afford any precise information on the subject of Vernacular Schools. It is known, however, that these schools are increasing in number and improving in character. In October, 1849, sanction was given by the home authorities for the establishment of one government vernacular school in each of eight tehsildarries, or revenue divisions of the North-West Provinces, to afford a model to the native village schoolmasters. The experiment proved highly successful; the number of village indigenous schools, within the eight tehsildarries, having increased in three years, from 2,014 to 3,469; and that of the scholars therein, from 17,169 to 36,884. The plan has now been extended to the whole of the North-Western Provinces, and also to portions of Bengal and the Punjab. The expense of the measure is estimated at £60,000 per annum.

Under the present system there is an educational department at each presidency, with an official of talent, largely remunerated, at its head; qualified district inspectors report periodically on the colleges and schools supported and managed by government, and statistical returns are to be annually sent, with the reports, to England. Universities are to be established, under charter, in different parts of India, and to be managed by senates, consisting of

the chancellor, vice-chancellor, and fellows of each; periodical examinations to be held in the different branches of art and science, and degrees conferred, unconnected with religious belief, on qualified persons who may be educated at the university college, or at affiliated institutions conducted by all denominations, whether Christians, Hindoos, Mohammedans, Parsees, Seiks, Buddhists, Jains, or any other religious persuasion, if found to afford the requisite

\* In 1829, I laid before Lord Wm. Bentinck, then governor-general, a plan for establishing a medical and surgical college at Calcutta, and pointed out the great benefits which would accrue from such an institution. I also offered to deliver gratuitously a course of lectures on anatomy, for which there was an abundance of "subjects," the Ganges being the place of sepulture for many million Hindoos whose bodies daily floated in thousands past Calcutta. Lord Wm. Bentinck warmly commended my proposition; but subsequently informed me that he found such a decided opposition to it in the council that it would be hopeless to get the sanction of those who feared every innovation, and deemed that the Hindoos would never attend a dissecting-room. In a few years after my plan was effectively carried out by others, and it has produced the most beneficial results. Hindoos even come to England to study and qualify themselves for the position of surgeon in the service of government. I know of no branch of science so urgently needed for the people of India as that of medicine and chirurgery; and it is to be hoped that public hospitals and lecturers will be established in the large cities for the benefit of the native population. The *Friend of India* thus alludes to the good done by the establishment of medical institutions in Malwa.—"In 1847, throughout the great provinces over which the authority of the resident at Indore extends, there was not, we believe, one single dispensary. There are now nine, all supported by funds derived from sources

independent of the British government, and all frequented by the people with an eagerness not always manifested in our older provinces. The nine are stationed at Indore, Oojein, Rutlan, Manpoor, Dhar, Dewas, Sillanah, and Bhopawur, the central station having two. From these establishments no less than 20,223 new patients have received medical relief, of whom about a third, or 6,465, were women and children. The number of females, in itself a sixth of the whole, deserves especial remark. No less than 2,468 surgical operations were performed; a number which appears enormous, unless very slight cases are included. When it is remembered that a few years since this vast amount of human suffering must have been unrelieved, or relieved only by the superstitious quackery of the Vedic doctors, the good which has been accomplished by Mr. Hamilton, and the energetic residency surgeon, will be readily appreciated. The whole expenses of these establishments amount to 16,032 rupees; and the receipts, chiefly from native chiefs and princes, have been a little above that sum. There appears to be no probability of any falling off; and in spite of their hereditary apathy, the neighbouring chiefs appear to be desirous of imitating a system which, under their own eyes, produces so excellent an effect."

† The reorganisation of village schools would bring instruction home to the mass of the people: they might be made industrial institutions, and combine agriculture with rustic mechanics.



course of study, and subject to the inspection, periodically, of government inspectors.

A people who have been subject, for several centuries, to a rigid political despotism, and sunk for ages in a gross system of idolatry, which, while it involved a slavish subjection to a dominant caste, encouraged the development and exercise of every sensual passion, must necessarily have both intellectual and moral faculties darkened to a degree almost surpassing belief. If it be a hopeless task to regenerate a human being, of whose originally small glimmering of soul scarcely a scintilla is left, and whose frame, diseased by debauchery, is returning to its original mire, how much more difficult must it be to raise a hundred million from the inert state in which the mass now vegetate through existence! Far easier is the task of elevating the New-Zealander or Kaffir; nay, the efforts making for the civilising of Bheels, Gonds, Mairs, Sonthals, and other aborigines in India, may be attended with earlier success than can be expected from the Hindoo, whose mind is still under the dominion of a Gooroo, or Brahmin. It is only, therefore, by great and long-sustained exertions on the part of government, aided by all its servants, that the literary, moral, and industrial education of the people of India can be accomplished.\*

THE PRESS.—The rise and progress in India of this potent engine of civilisation requires to be briefly noted. During the administration of Warren Hastings, the first English newspaper was established at Calcutta: it was styled *Hickey's Gazette*, and is described as a low, scurrilous, immoral publication; it soon died a natural death. In 1814, the *Government Gazette* was the only publication extant. With the increase of Anglo-Indian residents the number of newspapers augmented, and their character improved. In 1820 there were three weekly journals and one monthly periodical in Calcutta. In 1830, the number of daily, weekly, monthly, and annual periodicals issuing from the Bengal press was thirty-three. In 1834 the numbers stood thus:—*Daily*, political newspapers, four; commercial advertisers, four. *Tri-weekly*, political, two; commercial, one. *Weekly*, political, four; commercial, four. *Monthly*,

\* Government do not seem to have as yet given any attention to the highly important subject of female education. The character of the men of any country may be readily inferred by the intellectual progress and moral teaching of the women. The barbarous system of the Mohammedans is to keep the fair sex as mere sensual toys or household drudges; this cruel policy has, in some places, been adopted by the Hindoos from their Moslem conquerors; but it belongs not to their social ethics, as Menu enjoins reverence and respect; and there have been several distinguished female sovereigns and personages in Hindoostan. A London institution for promoting the education of the women of India is now in full operation, under the direction of a ladies' committee, who send out carefully-trained schoolmistresses, and superintend the working of the society at home and abroad. If the day have not arrived when girls' schools can be formed by government in India as well as in England, then to such a body as "the Society for promoting Female Education in the East," the work of educating the women of India might be temporarily entrusted by the state.

† There were *Ukhhbars*, or Court Circulars, containing such scraps of official news, or *gwp*, as the ruling power permitted to be made known.

‡ In 1829, in conjunction with Rammohun Roy, Dwarkanaut Tagore, Prussuna Comar Tagore, and other Hindoo gentlemen, I established in Calcutta a weekly journal, and printed it, under my own roof, in English, Bengallee, and

general, six. *Quarterly*, reviews and Army List, four. *Annuals* and almanacs, five. In the N. W. Provinces, Agra, Delhi, Cawnpore, and Meerut, had each an English newspaper.

At Madras there were *nine*, and at Bombay *ten* English newspapers and other periodicals; there was no stamp or advertisement duty, but postage was levied on the transmission of journals through the post-office. A registration of the name and residence of proprietors, and a lodgment of a copy with government of each issue of a publication, were required. Until Sir Charles Metcalfe, when acting governor-general in August, 1835, declared the press of India free, and its conductors subject only to the civil law, and trial by jury for libel, the government exercised a vigilant censorship, and could at any moment destroy an obnoxious journal by the deportation of its conductors to Europe (as was done in the case of the late Mr. Silk Buckingham); but since 1835, the newspaper press of India has been as free as that of England.

The native periodical press is of recent formation. During Hindoo and Moslem sway, no such thing as a newspaper with freedom of discussion existed.† Even in 1820 there were no journals in the vernacular: a few subsequently arose.‡ In 1834 there were fifteen newspapers published weekly in Bengal, some in Bengallee, others in Persian, and some with translations into English. At the same period there was in Madras one native newspaper published in Hindoostanee and in English; and in Bombay, four—in the Guzerattee, Mahratta, and Persian languages.

With the establishment of these journals, English and native, there came into operation several printing-presses for the publication of books, pamphlets, &c., which were of essential service to the spread of education and literature.

The latest data before me (1853) of the newspapers and periodicals in the English language at each presidency, show:—*Calcutta*—Daily, seven;§ bi-weekly, three; weekly, eleven; bi-monthly, five; monthly, eight; quarterly, nine; yearly, eight. This is a larger issue of periodical literature than Edinburgh, Dublin, or any city in the United Kingdom

Hindoostanee (Persian) characters, in parallel columns, with a hope of improving the tone of the native mind, and preparing it for a temperate discussion of public affairs. This journal was acknowledged to have been eminently instrumental in aiding Lord Wm. Bentinck in the abolition of *suttee*, by appeals to the humane feelings of Hindoo husbands, fathers, and brothers. When widow-burning was suppressed, attention was directed to other prevailing pernicious practices, such as duelling among Europeans, and flagellation in the army. Some very mild comments on a court-martial sentence, dated 20th July, 1829, of "one thousand lashes on the bare back of gunner Wm. Comerford, of the 1st company 5th battalion of Bengal artillery" (whose wife had been seduced by the captain of his company, and the seducer's life threatened by the aggrieved husband), led to the condemnation by the government of India of the journal, and its ultimate destruction, with the large property embarked therein. It is now unnecessary to advert to the injury sustained; the circumstance is mentioned as a fragment of history. The sacrifice was made for great objects, and it is seldom one is privileged to witness the beneficial results by the attainment of the end in view.

§ *Englishman*, *Hurkarn* (*Messenger*), *Citizen*, *Morning Chronicle*, *Evening Mail*, *Commercial and Shipping Gazette*, *Exchange Gazette*. The *Englishman* and *Hurkarn*, for instance, are of the size of the London *Times* without its supplement.

but London can exhibit. *Bombay*—Daily, three; \* bi-weekly, two; weekly, five; bi-monthly, four; monthly, three; quarterly, one; half-yearly, one; annually, two; and occasionally (transactions of scientific societies), four. *Madras*—Daily and weekly, nine; bi-monthly, two; monthly, eight; quarterly, three; annual, six. Throughout different parts of India there are also English newspapers, journals, &c., viz., at Agra, four; Delhi, four; Simla, one; Lahore, one; Serampoor (*Friend of India*), one; Rangoon, one; Bangalore (bi-weekly *Herald*), one; Poona, one; Kurachee (Sinde), two. Of the native press I can find no complete returns: in Bengal it has largely increased;† as also at Bom-

\* *Times*, *Gazette*, and *Courier*, each nearly equal in size to the Calcutta newspapers.

† The *Baptist Mission Press* is distinguished in Bengal above all others for the accuracy and excellency of its work; it does a large amount of business, the profits of which are all devoted to the mission. By the aid of this active society, the Scriptures have in whole or in part been translated into, and printed in, forty-four Asiatic languages, which may be thus enumerated:—

*Statistics of Translations (in the Languages of India) of the Holy Scriptures.*

Languages or Dialects.	No. of Copies.	
	Wholly.	In Part.
Afghan . . . . .	—	3,000
Armenian . . . . .	—	2,790
Assamese . . . . .	—	6,509
Battak (number not known.)		
Beloochee ditto.		
Bengallee . . . . .	3,500	{ 341,655+ 67,060}
Bhogulcundi . . . . .	—	1,000
Bhikaneera . . . . .	—	1,000
Bhutneera . . . . .	—	1,000
Bruj . . . . .	—	6,000
Burmese . . . . .	—	16,500
Cashmere . . . . .	—	3,000
Chinese . . . . .	6,400	9,100
Cingalese (about) . . . . .	5,000	5,000
Guzerattee . . . . .	—	1,000
Gurwhali or Shreenagur . . . . .	—	1,000
Haroti . . . . .	—	1,000
Hindi . . . . .	—	76,000
Hindoostanee or Urdu . . . . .	—	132,033
Javanese (about) . . . . .	—	3,000
Jumbu . . . . .	—	1,000
Juyapura (number not known.)		
Kanoj . . . . .	—	1,000
Khassi . . . . .	—	500
Kumaon . . . . .	—	1,000
Kunkunu . . . . .	—	2,000
Kusoli (number not known.)		
Kurnata . . . . .	—	1,000
Mahratta . . . . .	—	11,465
Malay . . . . .	—	1,500
Marwari . . . . .	—	1,000
Mugudh . . . . .	—	1,000
Multani . . . . .	—	1,000
Munipura . . . . .	—	1,000
Nepaulese . . . . .	—	1,000
Oodeypoor (number not known.)		
Oojin . . . . .	—	1,000
Oriya . . . . .	—	14,000
Palpa . . . . .	—	1,000
Persian . . . . .	—	37,500
Sanscrit . . . . .	—	71,580
Sikhi . . . . .	—	5,000
Sindhi (number not known.)		
Telinga or Telooogo . . . . .	—	1,000
Total number of Vols. . . . .	14,900	833,180

† New Testament. § Old Testament.  
(Parl. Papers—Commons; 6th August, 1853; p. 165.)  
The London Missionary Society have translated the whole

bay, where there are two daily newspapers in Guzerattee; five bi-weekly, four weekly (Marathi, Guzerattee and Persian), one bi-monthly (Marathi and English), one monthly (in Portuguese.)

The activity of printing may be judged by the number of establishments in full operation at Bombay, viz., English, seven; Guzerattee, eleven; Marathi, four; Persian, four; lithographic presses, five. In the N. W. Provinces, the number of native presses in operation during the year 1853, was forty; and the number of native newspapers issued therefrom, thirty-seven: some of these, though containing current news, supply information useful for schools, on subjects connected with geography, zoology, history (chiefly modern), education, popular errors, translations from Shakspeare, influence of the moon on animal and vegetable creation, and various scientific matters. The official report to government (19th No. of Selections) on the subject of these native presses, states—"Of the forty presses at work, five were established within the year, and four discontinued during the same period; in the same manner, five new newspapers were issued, and five old ones discontinued. The books published at the presses were 195, and the approximate number of copies of the same struck off for general use, 103,615. Two of the principal presses, viz., Gobind Pughonath's at Benares, and the Moostufae press at Delhi, have not furnished us with the number of copies they have published of each work issued by them: for these, therefore, the lowest average, viz., 200 to each work, has been taken; but it may confidently be assumed that a far greater number of copies were struck off, more especially as the last-named press is noted for its success in the publication and sale of books." The report adverts commendingly to several of the newspapers, viz., the *Koh-i-Noor*, at Lahore; the *Noor-ool-Absar*, at Agra; the *Quiran-oos-Sadyn*, at Delhi; the *Soodhakeer*, at Benares, "which ranks very high among the native journals of these provinces." One newspaper deserves special note, owing to its patronage and source:—"Another well-conducted periodical is the *Malha Ukhbar*, under the patronage of the Maharajah Holkar and Sir R. N. C. Hamilton, and published at Indore. The paper is edited by one of the teachers of the Indore school, and contains intelligence relative to the native neighbouring states, which have been personally visited by the editor, and with the condition and general affairs of which he would appear to be thoroughly conversant." It is to be regretted that there are no government reports on the state of the native press in Bengal, Madras, and Bombay. Very little foresight is needed to perceive the vast importance, political, social, and moral, which this rapid extension of printing is calculated to produce on the native mind throughout the length and breadth of Hindoostan: for weal or for woe our government is now committed to the principle of free discussion on every topic which the discursive faculties of the Asiatic may choose to examine. Some publications of a decidedly deistical and even atheistical character

Bible into two languages—the Canarese and Telooogo; aided that of the Oordoo, Guzerattee, Bengallee, Tamul, and Malialim. Of £63,963 annual income, £26,136 is expended in India. The *Church Missionary Society* spends in India £45,000 per annum, and has eighty-eight ordained clergymen engaged in its glorious work. The excellent Moravians are "breaking ground" in the Himalaya, and the Scotch church are effectively occupying Western India.

have already appeared.\* Paine's *Age of Reason* and Volney's *Ruins of Empires*, not long since found a more ready sale than any other imported books; for, in the transition state from Paganism to Christianity, the gulf of infidelity must, it is to be feared, be passed with ruin to many souls.†

The pure Hindoo mind, generally speaking, resembles very much that of the ancient Greek: it is logical, yet fond of romance—acute in perception, but wanting in profundity; delighting in subtleties, and eager for disputation; more vain than proud,—prone to exaggeration,—given to fine sentiments rather than to noble actions,‡—with a keener relish for the beautiful than the true,—physically brave, but morally pusillanimous,—superstitious, impulsive, ardent in love, bitter in hatred,—of vivid thoughts, bright imaginings, and lofty aspirations. With such a people, whose natural character has been subdued by centuries of despotism, great results may be produced by example and precept. If left unguided, the bias of fallen man must lead to evil; but with the powerful engine of the printing-press, government may exercise a permanent influence for good. There is no time to be lost: the school inspectors, European and native, now being appointed over every district, may become efficient instruments for the guidance of the native press in the inculcation of truth, the discussion of political economy, and the diffusion of virtuous principles.

CRIME.—For want of regular returns and a uniform system, it is not possible at present to show the extent of crime among the population generally; the nature of offences peculiar to the Hindoos or to the Mohammedans; the increase or decrease for several years; or the ratio that it bears to the number of inhabitants: such statistics would be very valuable, and might be obtained. Some returns prepared for

\* I obtained in 1845, at Bombay, one atheistical book, written by a Parsee, in reply to the Scotch missionaries, which was of such a blasphemous character that I burnt the work to prevent its falling into the hands of any young person in England.

† One of the ablest newspapers published in India, termed the *Calcutta Inquirer*, was edited by a Hindoo named Khrishna Mohun Bannajee, a man of brilliant abilities, perfectly well acquainted with the English language, which he wielded with great power against the government as a thorough "radical;" his infidelity was for a time complete. About the year 1834 he became acquainted with the missionaries; his scepticism was shaken, and he soon embraced Christianity—ceased to oppose government, "sounded the alarm to his countrymen and the authorities on the danger of imparting a merely intellectual education, as inevitably leading a large mass of the population into hostility to the British rule; and declared his entire conviction, both politically and morally, that the government would do well not to exclude Christianity from their schools."—(See valuable evidence of Colonel Jacob, of the artillery, before parliament, 4th August, 1853.) While in India, I invited the presence of many young Hindoo gentlemen to my chambers in the evening, and usually had large *soirees*: they quoted Shakspeare, Byron, and other popular works with remarkable memory, but almost invariably scoffed at the Bible and all religion; they had kicked away the crutches of Hindooism, and received no substitute; hence they stumbled through dark and fearful regions of atheism.

‡ There are many exceptions to this, especially in Rajpoot annals; and the devotion of the Hindoo sepoy to his European officer, has often been exhibited by the sacrifice of life to save that of his commander; but heroism is not, in the present age, the characteristic of the mass of the people.

§ Of this number but 46,381 were punished. The

the judicial department of the Madras government, furnishes useful details for the year 1850. It appears, that among a population of 22,281,527, there were in one year 167,063 alleged cases of assault, § 2,308 of cattle-stealing, 9,135 of theft, and 5,424 of various other offences: total, 183,930 cases of crime, for which summonses were granted by the district magistrates. The *village* police cases included 11,087 charged with petty assault, and 1,585 of petty theft.

The offences against the person in the Madras Presidency, show that the Hindoo is not the peaceable person that he is generally represented.¶ The murders in 1850 were 275; homicide, 87; wounding with intent to kill, 25; assault with wounding, 412; rape, 75: total, 864. The offences against property in the same year, were:—Robbery, with aggravating circumstances, 486; robbery, without ditto, 828; housebreaking, 5,959; theft, 2,350; cattle-stealing, killing, or wounding, 922; arson, 377; embezzlement and fraud, 205: total, 11,127. Forgery, 86; ¶ perjury or subornation, 11; various, 1,742: total, 1,839. This is a heavy catalogue of *known* crime, which, it is to be feared, forms but a small proportion of the amount actually perpetrated.

The crime of murder varies in different districts:—Malabar, 32 cases; Canara, 30; Cuddapah, 21; Salem, 23; Bellary, 20; in Gangam, Rajahmundry, N. Arcot, Coimbatore, Madura, and Tinnevely, the number of cases ranged from 12 to 16. The number of persons charged, in 1850, with abuse of authority as police-officers (principally peons, or constables and village police servants), was 1,410, which indicates grievous maladministration among the lowest officials.\*\* In proportion to the population of the whole presidency, the number of persons summoned for petty offences was one in eighty-three inhabitants, and the crimes and misdemeanours one in 1,000.

disproportion of persons punished to those summoned is a great evil. In Rajahmundry, for instance, 1,422 out of 14,571, or nine per cent. Thus ninety-one out of every hundred persons brought before the magistrates are acknowledged to be innocent: this indicates a very bad state of society.

¶ Murder and attempts to kill are awfully prevalent in every part of India: the nature of the assault varies with the character of the people, and is more manifest among the hot-blooded Mussulmen than the cooler Hindoos; the former slaying, the latter poisoning. Disputes regarding women are often the cause, and a blood feud is transmitted from father to son. Abstinence from animal food does not seem to indispose the vegetarian from taking the life of his fellow-man.

¶ Forgery, perjury, and coining, were deemed trivial offences under Pagan and Moslem rule. Coining base money was turned to advantage by local functionaries, who levied a tax from the coiners.

\*\* The native police throughout India (excepting the Punjab) is notoriously inefficient and corrupt. There can now be no doubt that tortures of the most atrocious and indecent character have been, and are still inflicted, for the purpose of extorting confession from alleged criminals, and still more with a view to obtain money from the suspected or the accused. This, in a great degree, accounts for the large number of persons summoned or apprehended. In Bengal, *dacoity*, or gang-robbery, is nearly as bad as in the days of Warren Hastings. No branch of our Indian administration demands reform more than the police; and perhaps in no department is it more difficult, owing to the unprincipled and profligate class of the community from whom the police are selected. The remedy elsewhere suggested—of erecting municipalities, and leaving the matter in the hands of corporations dependent on the ratepayers, appears to afford the best means of obtaining an honest and vigilant police.

The number of suicides and accidental deaths reported to the magistracy in 1850, within the limits of the Madras Presidency, is very remarkable:—

Cause of Death.	Men.	Women.	Children	Total.
<b>Suicides:—</b>				
Drowning . . . . .	195*	536	13	744
Hanging . . . . .	171	72	—	243
Poison . . . . .	4	25	1	30
Various . . . . .	28	10	—	38.
Total . . . . .	398	643	14	1,055
<b>Accidental deaths:—</b>				
Drowning in wells . . . . .	573†	913	662	2,148
Do. in tanks or rivers . . . . .	468†	270	521	1,259
By burning . . . . .	48	29	47	124
„ lightning . . . . .	99	27	16	142
„ sunstroke . . . . .	15	9	1	25
„ wild beasts . . . . .	85	21	13	119
„ landslips, &c. . . . .	67	26	35	128
Various . . . . .	497	87	64	648
Total . . . . .	1,852	1,382	1,359	4,593
General Total . . . . .	2,250	2,025	1,373	5,648

The recklessness of life which this table exhibits is awful; upwards of a thousand suicides‡ and 4,500 alleged accidental deaths, constitute only those known to or reported by the police; and probably many of those are murders.

**BOMBAY, 1850.**—The returns of crime for this presidency vary in form, and are not so full as those of Madras, neither do they appear to be so accurately prepared. Number of persons apprehended for crime by the *district* police, 60,673; by the *village* ditto, 2,398 = 63,071. But here, as at Madras, and owing most probably to the same cause—a corrupt police—the number apprehended or summoned is no actual test of crime. For instance, of 60,673 persons apprehended, 17,765 were discharged without trial, and 16,564 acquitted after investigation.§ The following official specification of crime for two years, throughout the Bombay Pre-

\* In the year 1849—men, 328; women, 527.

† In 1849.

‡ In India, as in China, suicide very frequently results from the use of opium and other intoxicating drugs, the constant use of which (as an aphrodisiac in the first instance) tends to the prostration of all vigour of mind or body, and ultimately to self-murder, as a relief from the torment experienced. Unbaptily, our Indian government, for the sake of obtaining a revenue, have encouraged not only the growth of opium for exportation, but also for private use. The late Henry St. George Tucker, a respected and able chairman of the E. I. Co., recorded in 1829 his sentiments on this point. “The supreme government of India have condescended to supply the retail shops with opium for domestic consumption. I believe that no one act of our government has appeared in the eyes of respectable natives, both Mohammedan and Hindoo, more questionable; nothing, I suspect, has tended so much to lower us in their regard. Was it becoming in a great government to establish shops for the retail sale of the drug? Is it desirable that we should bring it to the very door of the lower orders, who might never otherwise have found the article within their reach, and who are now tempted to adopt a habit alike injurious to health and to good morals.”—(*Memorials of Indian Government; Selections from the Papers of Henry St. George Tucker*, p. 154. Edited by J. W. Kaye: London, 1853.)

§ In Madras, out of 183,930 persons summoned or apprehended for alleged criminal offences, only 54,067 were punished.

sidency, will confirm the remark made under Madras, as to the immoral state of the population:—

*Crime throughout the Bombay Presidency in 1850, contrasted with 1849.*

Offences.	1849.	1850.
Adultery   . . . . .	213	201
Assault with homicide . . . . .	15	26
Ditto, with wounding or other violence . . . . .	503	499
Ditto, simple . . . . .	13,564	14,022
Arson . . . . .	677	570
Child-stealing¶ . . . . .	20	27
Forgery, or counterfeiting the coin . . . . .	95	103
Homicide . . . . .	33	39
Murder . . . . .	165	146
Perjury . . . . .	155	167
Rape . . . . .	69	84
Receiving stolen goods . . . . .	374	421
Gang-robbery, with murder . . . . .	18	13
Ditto with violence . . . . .	221	204
Ditto unaggravated . . . . .	56	81
Robbery, including burglary and cattle-stealing, with murder . . . . .	13	9
Robbery, including burglary and cattle-stealing, with violence . . . . .	2,087	2,211
Robbery, including burglary and cattle-stealing, unaggravated . . . . .	3,667	4,334
Theft, with murder, including that of children for the sake of ornaments . . . . .	11	14
Theft, simple . . . . .	7,276	8,406
Treason, rebellion, and riot . . . . .	5	1†
Thuggee . . . . .	—	1
Miscellaneous Offences, viz.:—		
Abuse of authority . . . . .	25	69
Abusive language . . . . .	9,342	9,451
Abortion, procuring and attempting, or assistant at ditto . . . . .	70	76
Attempt at theft or robbery . . . . .	639	783
Breach of contract . . . . .	67	84
Breach of religious law . . . . .	153	124
Breaking or destroying boundaries . . . . .	30	60
Bribery, and attempt at ditto . . . . .	120	192
Conspiracy . . . . .	130	112
Concealment of robbery or theft . . . . .	17	19
Concealment of murder . . . . .	7	3
Dhurna . . . . .	5	8
Embezzlement . . . . .	53	83
Escape from custody, and attempts and connivance at ditto . . . . .	49	71
Fraud . . . . .	312	277
Failure to furnish security . . . . .	62	30
Infraction of police rules . . . . .	999	729
Jhansa . . . . .	431	509
Neglect of duty and disobedience of orders . . . . .	916	950
Return from banishment or transportation . . . . .	30	36
Suicide, attempts at . . . . .	27	22
Traga, and attempts at . . . . .	73	103
Uttering base coin and using false weights . . . . .	159	263
Not included in the above . . . . .	2,408	2,301
Total . . . . .	45,351	47,982

|| This is a prevalent crime in India. The Punjab commissioners report that “the men of the Punjab regard adultery with a vindictiveness only to be appeased by the death or mutilation of the parties; yet in no country are instances of female depravity and conjugal infidelity more frequent.” The natives hate any system of law which will not give such redress as their vengeance may demand, and murder the aggressor when in their power to do so.

¶ Child-stealing was extensively practised under the native rule; and, despite our vigilance, is still practised in every part of India. While slavery existed and was encouraged, there was of course a premium offered for the abduction of infants from their parents. In the Punjab, for instance, “children of both sexes, especially females, were openly bought and sold.”—(Report, p. 44.) There the crime is now punished with ten or fifteen years’ imprisonment.

STATE OF CRIME IN BENGAL, MADRAS, AND BOMBAY—1850—'52. 543

The supposed number of offenders for the year is 96,591, of whom 78,366 only were apprehended. Of the prisoners tried, no more than 8,123 could read and write; the number tried for second offences was 2,503. The punishments are thus shown of 4,222 prisoners who were in the gaols on 31st December, 1850:—Imprisonment for life, with labour in irons, 131; ditto, without irons, 65; imprisonment, ten to fourteen years, 270; ditto, seven to ten years, 495; ditto, less than seven years, 2,762; ditto, without labour, 499. The number of deaths in prison throughout the year was 318: the average mortality being about six per cent. The sentences of death by the *Sudder Foujdaree Adawlut*, or highest criminal court, was only 13, which marks a very limited extent of capital punishment. Fines seem to be the most usual mode of dealing with offenders: of 26,352 sentenced by district police, 22,679 were mulct in money, or imprisoned in default of payment, 2,482 confined without labour, and 1,191 placed in the stocks; of 4,792 sentenced by magistrates, 2,535 were fined, 46 flogged and discharged, and the remainder imprisoned for various terms under a year. The session judges' sentences on 1,258 tried before them, comprised 151 fined, and the others imprisoned for various terms of one to five years.

The returns for Bombay,\* as well as Madras, note that petty crime prevails most in those districts where there is heavy taxation, failure of crops, general distress, and want of remunerative employment; also assaults with wounding† where the men still go abroad on all occasions armed. Where the inhabitants are employed in constructing tanks, wells, and other public works, crime has diminished. The

sums reported lost by robbery throughout the presidency, in 1850, is not large, viz., rupees, 558,345 = £55,854; and recovered by the police—rupees, 150,560; lost by arson—rupees, 24,034.

**NORTH-WEST PROVINCES.**—The details of crime for 1849,‡ in this large section of India, are very meagre. The number of persons apprehended during the year was 82,957; and, with the addition of 1,435 prisoners under examination 1st January, 1849, and 1,071 received by transfer, total disposed of, 85,463: of these only 45,863 (barely more than one-half) were convicted, and 32,842 were acquitted; the remainder died (51), escaped (65), were transferred, &c. No statement of crimes or of suicides, and no trustworthy returns from Bengal appear among the papers laid before parliament; but the following significant expression by the governor-general (Dalhousie), when examining the "Report of the Punjab," will, to some extent, show the state of the country. His lordship says—"I will boldly affirm, that life and property are now, and have for some time been, more secure within the bounds of the Punjab, which we have only held for four years, than they are in the province of Bengal, which has been ours for very nearly a century."§ According to a police report, it is stated that in 1851, out of a population estimated at 35,000,000, spread over 31 districts, 84,536 persons were arrested for 82,925 separate charges: one person accused in every 414 inhabitants—less than a fourth per cent. The convictions are quoted at 48,127, or one-seventh per cent. on the population. Value of property stolen during the year—rupees, 600,000; amount recovered—rupees, 74,111, or nine per cent. A military police, like that of Ireland, would be useful.

Persons apprehended, convicted, acquitted, and committed for Trial, in each Presidency, from 1850—'52.

Classification of Criminal Cases.	Bengal.			N. W. Provinces.			Madrās.			Bombay.		
	1850.	1851.	1852.	1850.	1851.	1852.	1850.	1851.	1852.	1850.	1851.	1852.
Pending on 1st of Jan.	2,634	2,496	2,865	1,356	1,527	1,505	1,984	3,624	3,298	1,068	—	—
Received by transfer	440	529	441	758	947	1,010	—	—	—	—	—	—
Apprehended during the year	107,967	107,718	104,474	83,059	82,112	94,747	202,506	192,609	194,514	78,588	—	—
Total	111,041	110,743	107,780	85,173	84,586	97,262	204,490	196,233	197,812	79,656	—	—
Convicted	63,407	61,583	63,316	46,170	46,012	55,904	57,684	51,463	52,300	33,865	—	—
Acquitted	40,092	40,799	35,864	32,580	32,283	34,677	78,929	78,255	78,018	20,882	—	—
Discharged without trial	—	—	—	—	—	—	64,107	63,144	63,544	22,864	—	—
Committed	3,962	4,080	4,417	4,300	4,079	4,369	—	—	—	—	—	—
Died	93	134	184	59	67	67	—	—	—	—	—	—
Escaped	503	540	614	32	45	45	146	73	86	960	—	—
Transferred	490	734	632	505	597	597	—	—	—	—	—	—
Pending, in gaol	765	994	913	707	749	749	3,624	3,298	3,864	1,085	—	—
" on bail	1,729	1,879	1,840	820	754	754	—	—	—	—	—	—
Total	111,041	110,743	107,780	85,173	84,586	97,262	204,490	196,233	197,812	79,656	—	—

|| Returns not yet received.

**PUNJAB.**—It is refreshing to turn from the crime and inefficient police of Southern India to the condition of the Punjab Proper, where, previous to the assumption of British sovereignty (29th March, 1849), crime and deeds of violence were rife. Under the sway of Runjeet Sing, the penal code was unwritten. There were but two penalties—mutilation and fine:

capital punishment was rare; imprisonment almost unknown; mutilation reserved for seduction and adultery—sometimes inflicted for violent theft and robbery; but for every offence from petty larceny to murder, impunity was purchased by money. From one to ten thousand rupees was the price of human life; occasionally a noted murderer or

\* Within the last two years, military officers have been made assistant magistrates, and placed in charge of the police. The result has been satisfactory: the policemen have been brought under discipline, and rendered effective.

† In the Punjab Proper, a complete disarming of the

population recently took place with the happiest results: 119,796 weapons of various kinds were seized or surrendered to the police.

‡ Dated Agra, 13th September, 1850.

§ Minute by Governor-general, 9th May, 1853.

robber was enlisted, on high pay, as a cavalier or a foot soldier; if he were a notorious villain, he was made an officer. When a district became disturbed, Runjeet Sing left the matter to his lieutenants, and did not object to the Draconian code of General Avitabile,\* in which hanging was the penalty for every crime, small or great.

Considering that 60,000 men were let loose over the Punjab after the surrender of the Seik power, and that the neighbourhood contained hosts of lawless mountaineers, on a frontier line of 500 miles, apt at all times to make forays, and prey on the more civilised and wealthy communities of the plains, the organisation of an efficient police became a matter of the first consideration. A territory extending over an area of 10,000 miles, between the Beas and Indus, peopled by several million warlike Seiks and fanatic Mussulmen,—by Rajpoots, Patans, Jats, and Goojurs,—by devotees and renegades of every faith in India,—required a preventive police with military organisation, and a detective force under civil control: the former consists of six regiments of foot (5,400 men), and twenty-seven troops of horse (2,700), regularly armed and equipped, and commanded by four British officers as police captains. The infantry guard the gaols, treasuries, frontier posts, and city gates, furnish escorts for the transit of treasure, and other civil duties; the cavalry are posted in small or larger numbers as a mounted patrol along the grand lines of road. Both horse and foot are ready at a moment's notice to aid the civil police, the infantry to crush resistance, the cavalry to expedite pursuit.

The civil police supported by the state (and independent of the city watchmen and rural constabulary paid by the people), consists of 6,900 men of all grades, divided over 228 jurisdictions, in each of which a police-officer is stationed, with one or two deputies and policemen. Each *tehsildar* (native collector of land revenue) is invested with defined police powers within his circle, with authority to overawe the police when corrupt, to animate them when negligent, and to aid the police-officers by infusing honour and vigour into the men. Unknown and suspicious characters are prevented prowling about; curfew penalties are imposed on those found wandering outside the villages between sunset and sunrise; parties not registered as public workmen or camp followers, and found within cantonments, are punished; armed travellers must deposit their arms at the police-station nearest to the pass, and receive them back on their return; all large bodies of men are watched; wayfaring men who put up at the village inns, must report themselves to the village chief; and any inn or hotel proved to have sheltered enemies to the public peace, is destroyed. The city watch and village police form an important link between the executive and the people.

The rural detectives here, as in other parts of India, form admirable trackers; among the middle and lower parts of the Dooabs, amid the wild tract of forest and brushwood, there is a scattered population, who

\* At Peshawur, where Avitabile (a Neapolitan) was supreme, the code was blood for blood, especially if the murdered man was a Seik; but "his object was the sacrifice of a victim rather than the punishment of guilt."—(Report of Commission, 1851; p. 11.)

† General Report on Administration of Punjab, p. 39.

‡ Infanticide unhappily prevails extensively in the Punjab. In Rajpootana it has existed for years; but here the Rajpoots are free from that crime which is committed chiefly by the Beaces or priestly class among the Seiks,

hitherto subsisted chiefly by stealing thousands of cattle, which once carried thither, never emerged thence with life. Roads have been cut through these haunts, and the professional trackers will follow a thief with stolen cattle for fifty to one hundred miles, although the ground may be overgrown with grass, or too hard to be susceptible of footmarks. *Dacoity*, during the first year of our administration, attained an alarming height; gangs of armed and mounted robbers scoured the roads at night, and attacked the houses of native grandees by day, after the fashion of the bush-rangers, as described in my volume on Van Diemen's Land. These gangs have been dispersed, hunted down by men braver than themselves, and the leaders have suffered death or been outlawed: those who escaped have been chased into perpetual exile among the fastnesses of Bikaneer and Raj'hasthan, or the wilds of the Great Desert. Now the Punjab is as free from *dacoity* as any part of Upper India. *Thuggee*, which was practised by a low class of Seiks, who, however, had not "the supple sagacity, insidious perseverance, religious faith, dark superstition, sacred ceremonies, peculiar dialect, and mysterious bond of union which distinguished their Hindoo brethren," has been suppressed, and an organised body of ferocious and desperate murderers destroyed. Finally, in no part of India is there more perfect peace than in the Punjab.† The returns show a moderate amount of crime,‡ especially when the recent habits of the population be considered. The ratio, in proportion to the population of the Lahore district, as compared with other parts of Western India, is thus stated:—

Districts.	Persons apprehended.	Persons convicted.	Detected criminals, one to	Convicted criminals, one to
Lahore division . . . 1849-'50	9,009	5,144	274·41	480·32
Do. do . . . 1850-'51	9,998	5,423	247·13	455·61
Delhi district . . . 1849	2,179	1,653	140·68	186·66
Agra do. . . . "	4,070	2,313	203·3	358·6
Allahabad district . . . "	3,476	1,424	204·33	498·78
Benares do. . . . "	3,620	1,776	204·81	423·10

Under the native laws, punishments for crime were exceedingly cruel; but except in extraordinary cases of treason or sacrilege, the poor were alone the sufferers, as the administration of justice was corrupt to the core. Torture was applied to both principals and witnesses, and by the gaolers also, to extort money from the prisoners. Flogging, mutilation, decapitation, drowning, burying alive, casting to wild beasts, and disembowelling, constituted the successive grades of sentences for those who were unable to buy off the infliction.

Under our rule capital punishments are restricted to murder; all other heinous offences are visited with transportation to Sincapoor or other places across the sea, with imprisonment and hard labour, on the roads or at public works, either for life or for a term of years.

who consider their order sacred, and that if their daughters lived and married, the fathers would be degraded: the children are consequently doomed to an early death. Other tribes also commit this unnatural and foul crime, viz., "some of the Mussulmen sects, and some subdivisions of the Khastree caste." The British officials, at the suggestion of some excellent missionaries, have had a public meeting of the chiefs, who have agreed to co-operate in the abolition of this unnatural crime. The purchase of slave girls is also decreasing.

## CHAPTER V.

### CIVIL GOVERNMENT—JUDICIAL ADMINISTRATION—MILITARY POWER—AND PROTECTED STATES AND PENSIONARIES.

THE earliest knowledge we possess of India, inclines me to think that the country was divided into several forms of government, some as military monarchies, others as aristocratic oligarchies,\* and many with republican† or democratic institutions; but all, more or less, combined the hereditary element in their constitutions, and were required, on great occasions, to unite for mutual defence against a foreign foe. Individual freedom was prized by the people; and when overcome by an enemy, many fled into the deserts and jungles, preferring solitude to subjugation.

The village or municipal system of India, which has outlived all dynasties and changes, combines the hereditary with the democratic: the pottal or mayor, in virtue of his birth, would succeed his father; but if unfit for his position, the commonalty might elect their chief. Among the Hindoos there is a strong tendency to office-succession in the same family—not so much in reference to feudality or clanship, as to the transmission of property from one generation to another, in an unbroken line, for a long series of years; a feeling tenaciously held by some races of mankind, and especially by several of Asiatic origin. This idea would doubtless tend to mould the form of government.‡

As a general rule, it may be stated that the *Hindoo* polity was monarchical, with some republican principles, a territorial feudal aristocracy, and hereditary rights and privileges; the Mohammedan rule (acquired by the sword) was styled imperial, and upheld

by despotic sway; no aristocracy but that of office or service was tolerated; no local institutions were encouraged; everything became, as far as possible, centralised; and all persons and property were at the mercy of the emperor, whose position, though to some extent hereditary, was only so after the manner of the Cæsars; for the large standing army at Delhi (as at Rome) could make or unmake the chief ruler.§ After the marauding Moslem hordes from Tartary and Afghanistan had consolidated their conquests, the empire was divided into soubahs|| or provinces, such as Bengal, Bahar, Oude, Malwa, Lahore, &c., over each of which there was a creature of the court, with the style and position of viceroy; most of whom, on the break-up of the Mogul dynasty, declared themselves sovereigns in their respective localities, although they preserved the formality of obtaining the investiture of office from the nominal emperor at Delhi.

When the English appeared in India, they followed the example set by the Arabs and Portuguese, —erected factories at places convenient for trade, and gradually turned them into forts for the protection of their goods and the security of their lives, during the lawless state which ensued consequent on the breaking up of the imperial government at Delhi.

Until 1707, the affairs of the factory of Calcutta were under the superintendence of Fort St. George or Madras: in that year a presidency was formed for Bengal, consisting of a president or governor, aided by a council of varying number—of

\* At the city of Nysa, during the Alexandrine period, the chief authority resided in a senate of 300 members. When the Portuguese first saw the Rajpoots, they described them as living under aristocratic republics.—(Barros—*Asia*, iv., p. 545.) The reader desirous of investigating the fragmentary information and legendary lore derived from the Puranas, Maharabat, Cashmieran annals, and other documents relative to the Hindoos, up to the period of the marauding invasions of the Mohammedans in the 11th century of the Christian era, will find abundant scope for inquiry in the works of Sir W. Jones, Colebrook, Wilkins, Wilson, Deguignes, Tod, Bentley, Heeren, Bird, Wilford, Moore, Elphinstone, Dow, Stewart, Masson, and other writers, who have praiseworthy devoted themselves to antiquarian researches connected with the history of the East. A summary of the scanty facts thus obtained would lead to no useful result, as scarcely two authors agree in their general conclusions, excepting in so far that about the period above-named India was divided into many separate states, with numerous tributary or independent rajahs or feudal chiefs.

† This word is used in reference to the prevailing idea of its signification. I do not myself think that any form of republic, whether carried on by an oligarchy or by a democracy, can long exist except under *Christian* polity, when each member of the commonwealth not only governs himself, but subjugates or directs his passions and desires for the promotion of the public weal. In proportion to the fulfilment of this duty, and so far as it accords with the Divine law, in such proportion will be the duration, prosperity, and happiness of a state, whatever may be the designation given to its form of government.

‡ Mr. George Campbell, B.C.S., in the first chapter of his useful work (*Modern India*, 1852), shows the difficulty of arriving at any definite conclusion as to the early form

of government among the Hindoos. He thinks the Rajpoots conquered the greater part of India, and although democratic or feudal at home, they were absolute sovereigns abroad, and that under their sway, previous to the arrival of the Mohammedans, India “enjoyed prosperity and wealth.”—(p. 12.)

§ At the beginning of the 18th century, the emperor had 30,000 cavalry and 400,000 infantry in constant pay. Merit, not birth, gave precedence, and largesses were frequently distributed.—(*Gemelli*.)

|| See p. 117 for the soubahs of the empire, and their administration at the period of Akber's death in 1605. Peter Heylin, in his *Cosmographie*, 2nd edition, London, 1657, p. 883, says that India was then, according to the latest observations, divided into forty-seven kingdoms, “whereof some few have still their own national kings, the rest all subject to the power of the Great Mogul.” By joining many lesser territories, he arranged the whole of India within the Ganges into twelve divisions, viz.—1. *Dulsinda* (W. of the Indus); 2. *Pengab* (E. of the Indus, more inclining towards the S.); 3. *Mandao*, lying between the Pengab on the N., Agra on the S., Delhi on the E., and the Indus on the W.; chief city, Mandao; well fortified, and said to be 30 m. in circumference; also Mooltan and other cities; 4. *Delhi* or *Delin*; 5. *Agra*, including Gwalior; 6. *Sanga*, on the E. of Agra, and S.W. of Cambaia; 7. *Cambaia*, S. of Dulsinda and part of Mandao, lying on both sides of the Indus, and containing Guzerat, &c.; 8. *Deccan*; 9. *Canara*; 10. *Malabar*; 11. *Narsinga* (N. of Travancore and S. of Orixia); 9. *Orixia* or *Oristan*; 10. *Botanler*, the petty kingdoms N.E. of the Ganges river; 11. *Patanaw* (Patna); 12. *Bengala*. The *extra Gangetic* territories were divided into Brama or Barma (Burmah), Chav-Chin China, Cambaia, Jangoma or Laos, Siam, and Pegu.

nine to twelve members of the civil class,—chosen according to seniority, and generally head factors, who held their lucrative situations at the will of the governor. In 1758 the government was remodelled by order of the directors of the E. I. Cy.: instead of one governor, four were nominated, each to hold office three months, and follow in rotation; these quarterly governors to be aided by a council of ten members. This extraordinary scheme was set aside by the four newly-appointed governors themselves: they saw it was not possible to work out such an absurdity, and they invited Clive to accept the undivided office of president; which was done.

In 1765, another form was devised by the home authorities, to remove existing disturbances in the executive, viz., a governor and four councillors, called a select committee. Before this body arrived, the disturbances had ceased to exist; but the governor and committee assumed the whole civil and military authority. In 1769, a new plan was devised, with a view to check the corruption, and procure the funds which the E. I. Cy. expected from India; a Board of Commissioners was to supervise the proceedings of the governor and council, and to exercise abroad almost the entire power which the Court of Directors were authorised to employ at home. The ship in which the supervisors embarked was never heard of after leaving port, and the plan was abandoned.

The Crown began, in 1772, to take an interest in the administration of India, which up to this period had been exclusively vested in the E. I. Cy. In 1773, parliament passed a "Regulating Act," under which, as previously stated (p. 313), a supreme government was established at Calcutta, Warren Hastings was appointed governor-general, and several changes were made defining the constitution of the company, as regarded both Courts of Directors and proprietors, and the powers to be vested in the subordinate governments at Madras and Bombay.\* In 1781, another act (21 Geo. III., c. 95) was passed, referring to the exclusive privileges of the company, which had hitherto been considered perpetual, but which were now fixed for a period of ten years, at the end of which the company was entitled to a three years' notice of the intention to resume the conceded privileges; and another step was taken to abridge the power of the company, or, at least, to associate it with that of the Crown. By a clause in the Charter Act of 1781, copies of all letters and orders relating to the civil or military government of India, were to be delivered to one of her Majesty's secretaries of state; and all documents relating to the revenues, to be forwarded to the lords of the treasury; and "the court should be bound by such instructions as they might receive from her Majesty, through one of the secretaries of state, as far as related to the conduct and transactions of the company and their servants with the country powers of India, as well as to the levying war and the making peace." Henceforth the company ceased to be solely responsible for the good government of the territories

\* The president and council, at each of these stations, were also henceforth prohibited commencing hostilities, or declaring or making war against any Indian princes or powers, or negotiating or concluding any treaty of peace, or other treaty, without the consent or approbation of the governor-general in council being first obtained, except in such cases of imminent necessity as would render it dangerous to postpone hostilities or treaties until the orders from the governor-general in council might arrive, or unless special orders be sent from the E. I. Cy. in England.

entrusted to its care. Censure for omission or commission ought to be applied to the double government.

In 1783, a committee of the House of Commons was appointed to inquire and to consider how the British possessions in the East could be best governed. In the succeeding year, Mr. Fox introduced his celebrated "India Bill," which was very adverse to the company,† "on the assumption that they had betrayed their trust, mismanaged their affairs, oppressed the natives of the country, and brought themselves to the verge of bankruptcy."‡ By the bill, it was proposed to place the territorial government, for four years, in the hands of seven directors, to be nominated by parliament; the commercial affairs (then of great magnitude) to be confided to nine "assistant directors," elected by proprietors of E. I. stock, but to act under the instructions of the seven nominated directors, who could remove the nine assistants. The company strongly protested against the bill; the measure became one of violent party feeling; the king wanted to be rid of Fox as his Majesty's prime minister, and called the youthful Pitt to his aid, who denounced the measure, which, however, was carried through the Commons on the 8th of December, 1783, by a majority of two to one; but was rejected, after several debates, by the House of Lords on the 17th of December, by a majority of nineteen.§ The ministry, also, was thrown out; Pitt succeeded Fox, and early in 1784, moved for leave to introduce a bill for the better government and management of the affairs of the E. I. Cy.: leave was refused by the Commons; parliament was dissolved; a new house, on the 6th of July, adopted the views of the minister; an act (24 Geo. III., c. 25) was passed constituting the Board of Control, or India Board of Commissioners, consisting of certain members of the privy council, including two of the secretaries of state and the chancellor of the exchequer for the time being; the first-named person, in the letters patent, to be styled the President. A secret committee (chairman, deputy chairman, and senior director) was formed out of the Court of Directors, through whom the Board of Control could communicate on all state matters of importance which it might not be deemed advisable to divulge to the Court, and who were to be compelled, if necessary, by *mandamus* from the Court of Queen's Bench, to transmit the orders of the Board to India. A secretariat and staff were organised for the Board, before whom were to be laid drafts of all despatches for inspection and revision; and if the Court failed, within fourteen days, to prepare despatches on any subject required by the Board, it was empowered to transmit the orders to India, without the concurrence of the Court. On this basis, subject to some alterations of detail in the renewed Charter Act of 1813, the government of India was administered, with slight modifications, until 1833, when the commercial character of the company ceased, the functions of the Court became entirely territorial and political, and subject still more to the supervision of

† In the caricatures of the day, Fox was represented as a carrier, with the India House on his back, with which he was proceeding along Leadenhall-street towards Westminster.

‡ Kaye's *History of the Administration of the E. I. Cy.*, p. 126.

§ Government, under the leadership of the Duke of Portland, had fifty-seven peers present, and nineteen proxies; the opponents, seventy-five present, and twenty proxies.



the Crown by the nomination of a fourth member of the council of India (Mr. T. B. Macaulay), who was also to be a law commissioner for the revision and codification of the Indian laws. Agra and the N. W. Provinces were formed into a lieutenant-governorship, under the immediate supervision of the governor-general. In every matter, the authorities in the East were subordinate to the Court of twenty-four Directors, elected by the shareholders of the E. I. Cy., and to the India Board or Board of Control, whose authority was made more absolute at each parliamentary interference.

In 1853 (20th of August), on the termination of the twenty years' tenure of power\* granted in 1833 to the E. I. Cy., a new act of parliament was passed, "to provide for the government of India." Under this enactment, the usual lease of India for several years to the E. I. Cy. was abolished, and the company became tenants at will, in trust for her Majesty, her heirs and successors, as a supervising authority in England; subject in all things to the Board of Control as representative of the Crown, whenever that Board might choose to exercise paramount power in the government of Indian affairs. By this act, the number of directors chosen by the proprietary† was reduced from twenty-four to fifteen; and the Crown was empowered to appoint six directors—the first three immediately, the second three as casual vacancies occurred,—all to have previously served officially in India for at least ten years. The Court of Directors, "under the direction and control of the Board of Commissioners for the affairs of India," were empowered to appoint a separate governor, or lieutenant-governor, for Bengal, and thus release the governor-general from much detail (which has since been done.) Every appointment by the Court of Directors of ordinary members of council at each presidency, now requires the sign-manual and counter-signature of the president of the India

Board.‡ A *Legislative Council* has been constituted, for making laws and regulations; the council to consist of one member from each presidency or lieutenant-governorship for the time being, of not less than ten years' official service in India. The chief justice of the Supreme Court of Judicature, one other judge of the Queen's courts, and two other persons of ten years' standing in the service of the company, to be selected by the governor-general, whose assent is requisite to the validity of all laws. The discussions of this council are carried on in public, with reporters of the press in attendance, as in the English House of Commons. Under this act, the patronage of appointment to the civil and medical service of India, which had heretofore been vested in the Court of Directors, ceased, and the nominations henceforth were thrown open to public competition under certain regulations, and examiners ordered by the Crown. The patronage of military and naval officers and chaplains still remains with the Directory, who, in lieu of the advantages derivable from civil appointments, receive—chairman and deputy, £1,000 each; directors, £500 each, yearly.§ Such, in substance, are the leading features of the act of 1853: it makes no mention of the trading charter of the company, which is in abeyance; and it leaves parliament at liberty to decree, from time to time, whatever changes may be deemed advisable in the administration of Indian affairs at home or abroad. The nomination of the governor-general, governors, commander-in-chief of the army, and other high functionaries, remains, as before, a matter of arrangement between the Board and the Directory; the former with a controlling power. The Court claims the right of recalling a governor-general, as it did in the case of Lord Ellenborough: but there can be no doubt that the ministers of the Crown tacitly consented, for certain reasons, to that stretch of prerogative, which is unnoticed in the act of 1853.

\* See p. 1, for changes in 1833.

† The number of proprietors of E. I. stock in April, 1852, entitled to vote in the election of directors by the possession of £1,000 stock, was 1,765; number having two votes, 311; three votes, 60; four votes, 42: total number of votes, 2,322. Number of voters in service of the company—civil service, 93: military, 160 = 253. Of twelve chairmen of the Court of Directors, between 1834 and 1852, all but three had served ten years in India; one had never been in the East; and two had commanded company's ships. Viewed as a whole, the Court of Directors, since the commencement of the present century, has contained many able men perfectly conversant with the affairs of India, and deeply interested in its welfare. At the present period, the Court possesses a high range of talent among fifteen members, all acquainted locally with India,—whose public character is identified with its good government and prosperity.

‡ The India Board consists of a president, who ranks as a secretary of state—salary, £5,000; parliamentary secretary, £1,500; permanent ditto, £1,500; assistant ditto, £1,200; five senior clerks, £900 to £1,150; six assistant ditto, £500 to £800; twelve junior ditto, £150 to £550; librarian, £400; and other officials. The secretariat establishment of the E. I. Cy. is large and well paid; but a government like that of India, where every transaction of the most trivial character is recorded in writing, and all correspondence and despatches, which are very voluminous, are transmitted in duplicate or triplicate, necessitates a large executive. The heads of departments are gentlemen of known talent and great experience; especially the secretary, Sir James Cosmo Melvill, who, by his administrative ability, information, and tact, is entitled to rank among the most eminent men of his

age. Edward Thornton, the historian of India; Professor Horace Hayman Wilson, the celebrated Orientalist; Mr. John Mill, son of the great historian (celebrated himself as an *economist* writer); Professor Forbes Royle, and Mr. Peacock, are among the *employés* at Leadenhall-street.

§ The patronage of the Court of Directors, previous to the act of 1852-'3, was undoubtedly large. I am also bound to add, that with a few exceptions, it was equitably distributed. From 1790 to 1835, the number of writerships (in civil service appointments) ranged from 20 to 25 a year; and from 1835 to 1851, the number at the disposal of the directors (exclusive of 40 at the nomination of the president of the India Board) was 546, or, per cent., 30. The cadetships for the army, and assistant surgeonies and chaplains, were also very numerous between 1796 and 1837: the total was 9,446; averaging 224 per ann. From 1835 to 1851, the number of cadets appointed (including 347 by the India Board president), was 4,916, or 289 per ann. Into the distribution of this patronage we have some insight, which is creditable to the distributors. Between 1813 and 1833, the number of cadets appointed was 5,092; of these, 409 were given to sons of military officers in the royal military, and 124 to those in the naval service; 224 to sons of company's civil servants; 491 to ditto in company's military servants; 40 to ditto of company's maritime service; 390 to sons of clergymen; and 1,119 to orphans and sons of widows. In the parliamentary returns of 1852-'3, the information is not so precise: of 546 writerships at the disposal of the directors, 164 were given to the sons of civil officers, and 96 to those of military = 260. Of 4,569 cadetships within the same date—342 to civil, and 1,100 to military officers of the company = 1,442.—(See Thornton's *Statistics* Kaye's *Administration of E. I. Cy.*—*Indian Progress.*)

It is not within my province or limits to criticise the changes that have been made, to say whether too much or too little has been done; time alone can now determine the wisdom of the policy adopted. The government of India is termed an "enlightened despotism." At Madras and Bombay, the governors are each aided by a council of three members, holding high office; the lieutenant-governors of Bengal and of Agra stand alone. The Supreme Council of India, with whom all power resides, consists of three or four members, of whom the commander-in-chief of the Anglo-Indian army is generally one: the other members are civil servants of the highest standing.

Each governmental department—such as foreign, home, financial, military—has a secretary of state, who is in fact its head, and responsible only to the governor-general, or, in the subordinate governments, to their respective administrators. There is, however, no uniformity: in some places there are departmental boards; in others, a single civil or military officer is entrusted with all power. The patronage of the governor-general is immense; for although seniority is the general rule, the exceptions are very numerous.

The administration of Indian affairs may be considered as in a transition state; the natives must, sooner or later, be admitted to a share in the executive and legislature of their country.\* In Jamaica and the West India colonies, I recently saw negroes, of pure African blood, sitting as "honourable members of her Majesty's council," and as representatives of white and black men in the legislative assemblies. Shall we deny to educated and trustworthy Hindoo, Mohammedan, Parsee, and other native gentlemen, those rights which are conceded in other parts of the empire to Africans who, a few years since, were slaves in the lowest stage of servitude?†

I do think the time is arriving (if it have not already come), when intelligent men, of every creed and colour, pecuniarily independent, of good moral character, and whose loyalty to the British government is unquestioned, should sit in a general Legislative Assembly for all India. They might be selected—as in other transmarine dependencies—by the Crown, nominated for life (*quam diu se bene gesserint*), and enjoy some honorary rank or privilege:

\* Of late years, the number of natives of India employed in the civil administration of the country, has been largely increased. The following official return shows the augmentation in twenty years:—

*Positions held.—Revenue and Judicial*—Principal Sudder Aumeens (native judges of three grades, who dispense civil justice)—1828, 64. Sudder Aumeens—1828, 157; 1849, 81. Moonsiffs—1828, 86; 1849, 494. Deputy magistrates—1849, 11. Deputy and assistant collectors—1849, 86. Sub-collectors' assistants—1849, 27. Abkaree superintendents—1849, 75. Tehseldars—1828, 356; 1849, 276. Sherishtedars—1828, 367; 1849, 155. Mamludars—1828, 9; 1849, 110. Dufterdars—1828, 2; 1849, 19. Camavidars—1828, 57. Adawluttees—1849, 5. Meer Moonshees—1849, 1. *Educational*—1828, 14; 1849, 479. *Various*—1828, 149; 1849, 990. Total, 1828, 1,197; 1849, 2,813. (Indo-Britons or Eurasians—as persons of mixed colour are designated—not included in these numbers.) Before 1828 there were only two grades of native judges, viz., the Sudder Aumeens and Moonsiffs. The office of Principal Sudder Aumeen was instituted in 1837, that of deputy collector in 1833, and that of deputy magistrate in 1843. In 1827, no native of India employed in the judicial or revenue department in Bengal received more than 250 rupees per mensem, or £300 per annum. The allowances now re-

this would prepare the way for a representative assembly and freer form of government.‡ In addition to this general council, municipal bodies might be formed in all the large cities, for cleansing, lighting, and police, erecting and supporting hospitals, and other useful institutions, and superintending generally the peace and welfare of the several communities. A general act might be passed, empowering the formation of these corporations in all cities having at least 10,000 inhabitants: the people would thus become familiarised to self-government, by managing their own local affairs; and the Hindoos would recognise, in an improved form, one of their most ancient and cherished institutions, and look to the re-establishment of the *punchayet*, or trial by jury, as an indispensable adjunct for the administration of justice. In a sanitary point of view,—in the suppression of crime,—in providing for the poor, infirm, and diseased,—and in organising the elements of civil life and social concord, the formation of municipalities throughout India would be attended with the most beneficial results.

For executive purposes, British India is divided into districts, each of which, on an average,§ contains the annexed area and population, and yields a land revenue as estimated:—

Presidency.	Area sq. m.	Population.	Land Rev.
			£
Bengal . . . .	3,200	1,000,000	103,000
N. W. Provinces	2,300	730,000	130,000
Madras . . . .	6,500	800,000	165,000
Bombay . . . .	4,200	600,000	160,000

Each of these districts in N.W. Provinces, Madras, and Bombay, is under the charge of *one* European official, styled "Magistrate and Collector." In Bengal Proper, the magistracy and collectorship are held by separate persons. These *covenanted* officers are of the highest class, and consist of those who go out as "writers" (the old designation.) The prize of these high appointments is now obtained by undergoing a public examination in languages and elementary branches of knowledge. The range of emoluments varies from £600 to £3,000 a-year and upwards; if the lieutenant-governorship or governor-

ceived are as follow, at 2s. the company's rupee. One receives £1,560; 8 receive £840 to £950; 12—£720 to £840; 68—£600 to £720; 69—£480 to £600; 58—£360 to £480; 277—£240 to £360; 1,173—£120 to £240; 1,147—£24 to £120 per annum. Since 1849, the number employed has been largely increased.

† Europeans and natives employed in India. BENGAL (in May, 1830, and 1850).—*Judicial branch*—Europeans, 114 and 218; native, 11,161 and 22,800. Salaries, &c., 2,100,052 and 3,225,625 rupees per annum. *Revenue ditto*—Europeans, 112 and 204; natives, 3,447 and 6,806. Salaries, 651,962 and 1,601,810 rupees. *Customs*—Europeans, 82 and 146; natives, 1,652 and 271. Salaries, 290,490 and 340,835 rupees. *Salt*—Europeans, 41 and 32; natives, 8,569 and 4,786. *Opium*—Europeans, 15 and 42; natives, 1,638 and 2,066. Salaries, 157,433 and 378,620 rupees. Various other departments—Political, educational, &c.—Europeans, 375 and 573; natives, 16,247 and 32,076. Salaries, 2,642,437 and 4,932,356 rupees. *Commercial*—Europeans, 33 and 9; natives, 2,026 and 39. Salaries, 261,666 and 22,438 rupees. PUNJAB, (1850).—Europeans, 185; natives, 10,986. Salaries, 1,619,546 rupees per annum.

‡ Natives of Ceylon sit in the Legislative Council there.

§ *Modern India*; by George Campbell, B.C.S.: London, 1852, p. 239.

COVENANTED AND UNCOVENANTED CIVIL SERVANTS IN INDIA. 549

ship of a presidency be obtained.\* The *uncovenanted* consist of Europeans, or Eurasians (gentlemen of colour born in India), who hold subordinate positions, and cannot rise into the covenanted class: their emoluments are good, but scarcely equal to their deserts. The number and position of this class are being augmented and improved; and many soldier-officers now find active employment in magisterial and other civil duties.

The number of covenanted or of uncovenanted civil servants at each presidency in 1834 and 1851, the number on the retired and on the active list, and on furlough respectively, is thus officially stated in June, 1852:—

Civil Servants.	Bengal.†	Madras	Bombay.‡
1834.			
<i>Covenanted:—</i>			
Active list (including those on furlough) . . . . .	506	225	152
On furlough . . . . .	63	32	29
Retired as annuitants (other retirements not known) . . . . .	37	26	10
<i>Uncovenanted:—</i>			
Active list . . . . .	1,049	430	108
On furlough . . . . .	None.	None.	None.
Retired (pensioners) . . . . .	102	116	25§
1851.			
<i>Covenanted:—</i>			
Active list (as above) . . . . .	498	188	126
On furlough . . . . .	45	27	16
Retired as annuitants (other retirements not known) . . . . .	135	96	49
<i>Uncovenanted:—</i>			
Active list . . . . .	2,014	838	120
On furlough . . . . .	None.	None.	None.
Retired (pensioners) . . . . .	78	113	4¶
Who have served ten years:—			
1834.			
<i>Covenanted:—</i>			
Retired (those only who are annuitants being shown on the books) . . . . .	37	26	10
On furlough . . . . .	43	24	19
<i>Uncovenanted:—</i>			
Retired (pensioners only being shown on the books) . . . . .	102	116	25
On furlough . . . . .	None.	None.	None.
1851.			
<i>Covenanted:—</i>			
Retired (as above) . . . . .	135	96	49
On furlough . . . . .	26	16	13
<i>Uncovenanted:—</i>			
Retired (as above) . . . . .	78	113	4
On furlough . . . . .	None.	None.	None.

The duties of the European civil servants in India, are thus described by the E. I. Cy. in their statements laid before parliament in 1852-'53:—

“Civil servants are prepared for the higher offices in Bengal by previous instruction in this country. At Haileybury the basis of education is European literature

\* Governors of Madras and Bombay, and Lieutenant-governor of Bengal; £10,000 a-year each, and an official residence, &c.; members of council, £8,000 per annum; secretary of government of Bengal, £3,600 per annum. Such are a few of the prizes now thrown open to public competition throughout the British empire.

† Including Agra, the newly-acquired Cis and Trans Sutlej territory, and the Punjab.

‡ Including Sindh.

§ Exclusive of the pensioners on “Warden’s Official Fund,” which cannot be shown, as the accounts received from India do not distinguish Europeans from natives.

|| Exclusive of pensioners on “Warden’s Official Fund.”

and science (classics and mathematics), to which is added, the study of the general principles of law, together with political economy, history, and the rudiments of the Oriental languages.

“At the college of Calcutta the studies of the civilian are resumed, and directed to the mastery of the vernacular languages, the acquisition of the principles of Mohammedan and Hindoo law, and a familiarity with the regulations and the legislative acts of the Indian government; the object of the two institutions being to combine the education of an English gentleman with the qualifications of the native law officer.

“Upon passing his college examination, the civilian commences his career in the public service as assistant to a collector and magistrate. He is thus engaged alternately in the judicial and the revenue line. In his magisterial capacity, he takes the deposition of witnesses, and prepares cases for the decision of his superior; or he hears and determines, subject to revision, cases specially made over to him by the magistrate. His power of punishment extends to two months’ imprisonment, a period which, when he is entrusted with special powers by the government, is enlarged to twelve months. As assistant in the revenue department, he decides petty claims relating to arrears or exactions of rent.

“After this apprenticeship of several years, the assistant is regarded as a candidate for promotion. He is then subjected to a further examination, with the view of testing his knowledge of the languages and the laws of the country; and his promotion is made dependent on the success with which he passes the test. That the examination is severe and searching, may be gathered from the fact, that of twenty civilians who came up in 1852, seven only were passed. A successful candidate is then deemed qualified for the office of collector or magistrate.

“As magistrate, he directs the police operations of his district, and takes cognizance of all criminal matters. The law provides for his dealing with certain classes of offences, but limits his power of punishment to three years’ imprisonment. Parties charged with graver crimes are committed by him to take their trial before the sessions court.¶ In certain cases the magistrate may inflict corporal punishment, not exceeding a few stripes, and no other punishment is then superadded. Appeals from his sentences, or from those of his assistant, when vested with special powers, lie to the sessions judge.

“As collector, he has charge of the district treasury. He superintends the collection of the government rental; puts in execution coercive measures against defaulters; sells estates for arrears of revenue and manages those escheated or bought by government. He superintends the partition of estates, and regulates the distribution of the government assessment among the several subdivisions. He also exercises judicial powers in settling, by summary

¶ “British subjects guilty of felony or other grave offences, are committed for trial before the Queen’s Court. In cases of assault and trespass, they are subject to the jurisdiction of the magistrate (European or native), which extends to the imposition of a fine of 509 rupees, and to imprisonment for two months if not paid. An appeal from the decision of the magistrate lies to the sessions judge, and the case, if so appealed, is not liable to be removed to the Queen’s Court by a writ of *certiorari*. Further, Europeans, by being rendered subject to penal recognizances for the maintenance of the peace, are virtually amenable to the jurisdiction of the *mofussil police*.”

process, disputes among the agricultural community regarding rents.

"After further experience, the civilian is promoted to the judicial chair.

"The civil judge presides over the civil courts in his district, and supervises the dispensation of justice by his native functionaries. It is competent to him to withdraw suits from the courts below, and to try them himself.\* He hears appeals from the decisions of his principal native judge, when the matter in dispute does not exceed the value of £500; but he may transfer appeals from the decisions of the other subordinate courts to the file of the principal native judge.

"In the sessions court the judge is required to try all persons committed for heinous offences by the magistrates. He has not the power of life and death, but his jurisdiction extends to sixteen years' imprisonment.† All capital cases, after trial, must be referred for the disposal of the Nizamut Adawlut; as also those cases in which the sessions judge dissents from the opinion of his Mohammedan law officer. Persons not professing the Mohammedan faith are not to be tried under the provisions of the Mohammedan law, but under the regulations, the judge being assisted by a *punchayet* or assessors, or a jury, but having power to overrule their opinion. The sessions judge holds a monthly gaol delivery, though in fact he may be said to be constantly sitting. He sits in appeal from sentences passed by the magistrates and their assistants.

"The Sudder Dewanny Adawlut, the highest of the company's courts, is composed of the judges selected from the civil and sessions judges. It has ceased to exercise any original jurisdiction. It is the court of final appeal in the presidency, and controls all the subordinate civil tribunals. Besides regular appeals from the original decisions of the European zillah judge, and in certain cases from those of the Principal Sudder Aumeen, the court is competent to admit second or special appeals from decisions of the courts below on regular appeals. The grounds for special appeal are when the judgments shall appear inconsistent with law or the practice or usage of the courts. The power thus given to the Sudder Court of hearing special appeals extends their means of supervision, and brings judicially before them the proceedings and decisions of all classes of judicial officers, and affords opportunity for correcting errors and insuring consistency, it being one of their duties to regulate the practice

\* "In the trial of civil suits, original or appeal, it is competent to the European judge to avail himself of the assistance of natives in one of the three following modes:—1st. By a *punchayet*, who conduct their inquiries on points submitted to them apart from the court, and make their report to the judge. 2nd. By assessors, who sit with the judge, make observations, examine witnesses, and offer opinions and suggestions. 3rd. By a jury, who attend during the trial, and after consultation deliver in their verdict. But under all the modes of procedure described in the three clauses, the decision is vested solely and exclusively in the judge."

† "The great length of the terms of imprisonment in India is one of the vestiges of a barbarous law, or rather a consequence of its abolition. In 1793, the punishment of mutilation was abolished, and it was then ordained that if a prisoner be sentenced by the *fitwa* of the Mohammedan law officer to lose two limbs, he should in lieu thereof be imprisoned for fourteen years, and if sentenced to lose one limb, to seven years. Under a later law, it is competent to the judge to impose two years' additional

and proceedings of the lower courts. Moreover, each judicial officer is required by law to record his decisions and the reasons for them in his own vernacular tongue; and this affords the Sudder Court extended means of judging correctly of the individual qualifications of their subordinates. The Sudder Court sits daily except during the Dusserah and the Mohurram,‡ when all civil proceedings are suspended. In the trial of appeals, the proceedings of the lower tribunals are read before one or more judges. A single judge is competent to confirm a decree. Two of three sitting together must concur for its reversal, whether the appeal be regular or special. Decisions of the court in suits exceeding in value £1,000, may be carried by appeal before the Queen in council. Monthly reports are received of the state of business from every district, and an annual report is made to government of the administration of civil justice, both in the Sudder Court and in its subordinate courts.

"*The Nizamut Adawlut*.—The judges of the Sudder Dewanny are the judges also of this court. The Nizamut has cognizance in all matters relating to criminal justice and the police of the country; but it exercises no original jurisdiction. Appeals from the sessions judges lie to this court, but it cannot enhance the amount of punishment, nor reverse an acquittal. The sentences of this court are final. In cases of murder and other crimes requiring greater punishment than sixteen years' imprisonment (which is the limit of the sessions judges' power), all the proceedings of the trial are referred for the orders of the Nizamut. The Mohammedan law officer of this court (unless the *fitwa* be dispensed with) first records his judgment, and all the documents are then submitted to the judges of the Nizamut. If the case be not capital, it is decided by the sentence of a single judge. Sentences of death require the concurrence of two judges.§ Trials before the sessions judge for crimes punishable by a limited period of imprisonment, are also referred, as already intimated, for the disposal of the Nizamut, in cases where the sessions judge differs from the opinion of the Mohammedan law officer. As in civil matters, monthly abstracts of all trials are laid before the judges of the court sitting together, when the proceedings of the sessions judges are reviewed. In sentences of acquittal which may be disapproved, though the Nizamut cannot interfere so as to affect the sentence, the judge is admonished.

"*Revenue Commissioners and Board of Revenue*.

imprisonment in lieu of corporal punishment. A reduction in the terms of imprisonment has been repeatedly urged upon the government of India by the home authorities."

‡ "The Dusserah is a Hindoo festival continuing for ten days, which are appropriated to religious ceremonies. The Mohurram is a fast kept by Mohammedans in commemoration of the death of Hossein and Hasein, the two sons of Ali by his cousin Fatima, the daughter of Mohammed."

§ "If the judges of the Nizamut concur in the verdict of the lower court, and the prisoner be considered deserving of a higher degree of punishment than could be awarded by the sessions judge, he may be sentenced to suffer death, or to undergo imprisonment for twenty-one years; but if sentenced to imprisonment for life, then transportation for life, either to the penal settlements of Singapore, Penang, or Malacca, the Tenasserim provinces, Arracan, or Aden, would be substituted; but no native of India can be transported to New South Wales or the adjacent islands."

—In Bengal and the North-Western Provinces there are revenue commissioners, a class of officers superior to collectors, each of whom has authority extending over a division comprising several collectorates; his duty being that of watching the proceedings of the collectors therein, and ascertaining that in every respect they are regular and consistent with just principles of administration.

“All matters relating to the settlement, collection, and administration of the revenue, ultimately fall under the superintendence and control of a Board of Revenue, which exercises a general supervision over the proceedings of commissioners and collectors. Some arrangements, not dissimilar, exist for the like purposes under the other presidencies. Appointments to the Revenue Board, and also to the office of revenue commissioner, are made by selection from civil servants employed in the revenue department.”

The average period of service of the Bengal civil servants is stated to be—Judges, Sudder Court, Calcutta, 34; members of Board of Revenue, 30; secretaries to supreme government, 25; magistrates and collectors, 18 to 26; magistrates, 7 to 19 years; other grades varying in proportion.

ADMINISTRATION OF JUSTICE.—Within the limits of the cities of Calcutta, Madras, and Bombay, there are supreme courts of judicature, vested with all the powers of the courts at Westminster, and presided over by chief and puisne judges nominated from the British bar. In these courts, trial by jury takes place; in civil and criminal cases, the law administered is in conformity with that of England, and there is a regular “bar” and solicitors. Beyond the limits of the three principal cities there are “company’s courts,” viz., at each presidency a supreme civil and a supreme criminal court; the former being one of appeal from numerous zillah or district courts, of which there are in Bengal, 32; in the N. W. Provinces, 21; in Madras, 20; in Bombay, 8. The European judges who preside in the company’s courts are not educated for the “bar.” There is no jury to assist in deciding on the facts of a case; and the law is a compound of Hindoo, Mohammedan, and English principles, and a decision rests with the varying feelings and prejudices of the judge. This great defect will, it is expected, be corrected.

Civil justice is now almost wholly dispensed by native judges, styled Principal Sudder Aumeens, Sudder Aumeens, and Moonsiffs. The first-named are divided, in Bengal, into two classes, who receive each £720 and £480 per annum. Sudder Aumeens receive £300, and Moonsiffs £100 to £200 per annum.\* Their functions are thus officially described:—“The jurisdiction of the two lower grades is limited to suits in which the matter in dispute does not exceed a certain value, the limit being of course higher in regard to the upper of these two grades than to the inferior. To the jurisdiction of the highest native judge there is no such limit. To these different classes of native judges is entrusted the original cognizance of all civil suits; and no person, whether British or native, is exempt from their jurisdiction.

“The first grade of native judges (Principal Sudder Aumeens) may sit in appeal from the decrees of the two inferior courts; and as the law, except in special cases, allows but one trial and one appeal, the power of final decision in by far the larger number of suits rests with native judges.†

“Further, suits wherein the amount in dispute exceeds £500 may be tried either by the Principal Sudder Aumeen or by the European zillah judge, if he so please. But in either case an appeal lies only to the highest company’s court, the Sudder Adawlut.‡ Here then the native judge exercises the same extent of jurisdiction as the European functionary. Native and British qualification and integrity are placed on the same level. The suits now entrusted to a head native judge were confided, before the passing of Act No. 25 of 1837, to no officer below a European provincial judge.

“The number of appeals affords evidence of the feeling of the people in respect to the administration of the law. The number affirmed and reversed is evidence of the qualifications, intellectual and moral, of the native functionaries as estimated by their superiors. The proportion of appeals to original decisions in the suits disposed of in the N. W. Provinces, for seven years, is about fifteen per cent.; the proportion of decisions reversed in the original suits is little more than four per cent., as shown in the following table:—

Years.	Original Suits decided on Merits.		Appeal Suits.		Reversals.	Proportion of Reverses to Original Suits.
	By Zillah Judges.	By Native Judges	By Europ. Judges	By Native Judges		
1843	31	39,181	4,505	3,083	2,301	5½ per cent.
1844	17	40,213	4,397	2,902	2,020	5 ”
1845	10	40,579	3,980	2,809	1,895	4½ ”
1846	3	41,775	3,900	2,392	1,676	4 ”
1847	8	43,169	3,608	2,559	1,673	3¾ ”
1848	11	41,340	3,977	2,916	1,736	4 ”
1849	20	44,933	3,802	3,674	2,042	4½ ”

\* Mr. Edward Thornton, in reference to these salaries, says—“If the value of money be estimated by the wages of labour in the two countries, it would appear that its worth is about seven times greater in India than in England. The rate of wages issued to 2,000 men employed on the Calcutta and Bombay mail-road is three rupees, or 6s. per month each; and assuming the rate of wages in England at 10s. per week, £24 in India is equal to £168 in England.”

† “A. sues B. for a debt of £10. The suit is instituted in the Moonsiff’s court, and conducted by a vakeel or pleader. The pleadings and motions may be submitted in writing, the pleader merely examining the witnesses, or he may have recourse also to oral pleading. The judge is required by law to record his decision, and the reasons for

it, upon the face of his decree. The dissatisfied party may appeal from the decision to the European judge of the district, who either hears the appeal himself, or refers it to his Principal Sudder Aumeen. The decision in either case is final, except upon a point of law, when a special appeal lies to the Court of Sudder Adawlut; thus the subordinate courts’ proceedings are brought under supervision.”

‡ “The course of proceeding in such cases is as follows:—C. sues D. for £1,000. The suit must be instituted in the court of the head native judge; and if not withdrawn by the European judge of the district, it is tried by the native judge. The appeal in either case lies to the Sudder Adawlut, from whose decision, however, there is an appeal to the Queen in council, in all cases where the value in dispute amounts to £1,000.”

"By a more recent enactment, natives of India are eligible to the office of deputy magistrate. They are competent in that capacity to exercise the powers of the European covenanted assistant, and even under orders of the local government, the full powers of magistrate. When entrusted with the latter, their power of punishment extends to three years' imprisonment, and they are also competent, in cases of assault and trespass committed by Europeans on natives, to inflict a fine to the extent of 500 rupees, and to imprison for the period of two months, if the fine be not paid. Natives are frequently invested with full powers of magistrates.

"Native deputy collectors are subordinate to the European collectors, but they are competent to transact any of the duties of the collector. Their proceedings are recorded in their own names, and on their own responsibility.

"The selection and promotion of native judicial functionaries are regulated as follows:—Vakceels or pleaders, before obtaining diplomas, must have passed an examination before a committee, consisting of the European revenue commissioner, the European judge of the district, the Principal Sudder Aumeen, the principal of the college or other educational establishment at the station, and such other officers as may be appointed by the government.

"The examination may be presumed to be of stringent character, from the following results:—In 1852, at Agra, twenty-seven candidates presented themselves for examination,—*none* passed. At Bareilly, forty-eight candidates, of whom *two* passed. At Benares, seventy-two, of whom *four* passed. The Moonsiffs (the lowest grade of native judges) are selected from the vakeels, and appointed by the Court of Sudder Adawlut. The Sudder Aumeens are selected from the Moonsiff class by the Sudder Adawlut, and appointed by the government. The Principal Sudder Aumeens are selected from the class of Sudder Aumeens, and appointed by the government. The service is one of gradation, but not of seniority, the superior ranks being filled up by the most efficient men of the inferior."\*

A reform is needed in this important section of our civil government of India. By the Charter Act of 1833-4, it was intended to remedy the defect; and it was mainly with this object that a distinguished person (T. B. Macaulay) was then nominated fourth member of the council of India. Indian law commissioners (T. B. Macaulay, Macleod, Anderson, and Millett) were subsequently appointed, and in June, 1835, laid before the governor-general a draft penal code to be applied to all India; and in October, 1847, it was finally printed for distribution, examination, and discussion at home and abroad. The code contains twenty-six chapters, with notes on each, occupies 124 folio pages, and is undoubtedly a philosophical production. The principal sections refer to *offences against*, or in relation to, the state, army and navy, public tranquillity, government servants, justice, revenue, coin, weights

and measures, public health, safety and convenience, religion and caste, the press, offences against the human body, property and property marks, documents, illegal pursuit of legal rights, criminal breach of service contracts, marriage, defamation, criminal intimidation, insult and annoyance, abetment and punishment.† This code has been much criticised; but nothing has been done towards carrying it into effect, or amending its provisions.

ANGLO-INDIAN ARMY.—It is usually said, that the tenure of British power in India is held by the "sword:" this tenure is, however, changing into one of "opinion," *i.e.*, a conviction of the justice, honesty, and advantage of our rule; it will, however, require many years before the latter be fully acknowledged, and before the motley, unsettled, and in many parts turbulent people subjected to our sway, can be left to the simple administration of a purely civil government. The army of India (as was recently that of Ireland) must be considered a police force for the preservation of internal tranquillity, and, by means of its well-educated 6,000 European officers, as an efficient means of promoting the civilisation of the people.

The formation of a body of armed men had its origin in the necessity of protecting factories in which valuable goods were stored, after the manner previously adopted by the Portuguese, and their predecessors (the Arabs) on the coasts of Asia and of Africa. When once a selected class are set apart, with weapons in their hands, to protect the lives and property of others, discipline becomes imperative, and for this purpose a few Europeans were sent from England. In 1747, an act of parliament provided for the regulation of the E. I. soldiers; and in 1754, articles of war, comprised in fifteen sections, were founded on the above act, and promulgated "for the better government of the officers and soldiers in the service of the company of merchants trading in the East Indies." Dupleix organised a brigade, with French officers; the English, in self-defence, did the same. Hindoo and Mohammedan rulers sought the aid of foreign mercenaries, and assigned territorial revenues for their support; interference with the disputes of native states created the necessity for more troops; Hindoos and Moslems were ready to enlist under French or English banners, and made good soldiers; they fought against each other, irrespective of caste or creed,—were faithful and attached to their European leaders; and, in due process of time, an Anglo-Indian standing army was formed and brigaded (*see p.* 304), which grew from year to year, until it has now attained the following proportions:—Aggregate strength of the Indian army in 1851,‡ 289,525: component parts—Queen's regiments—five of dragoons, twenty-four of infantry = 29,480 men; E. I. Cy's. European infantry, six regiments = 6,266 men; company's artillery, 16,440, divided into European horse and foot, and native foot or Golundanze; engineers, or sappers and miners, 2,569. *Natives*—cavalry, regular, twenty-one

\* Statistical Papers relating to India, laid before parliament by E. I. Cy., 1853.

† Parl. Papers, No. 673—Commons; 3rd August, 1838.

‡ In 1764, there were eighteen battalions of native infantry, perhaps about 15,000 men. In 1765, Clive found the army of Bengal (the principal forces) consisted of four companies of artillery, a troop of hussars, about 1,200 irregular cavalry, twenty-four companies of European infantry, and nineteen battalions of sepoy, with a due proportion of European officers. The aggregate strength of the Anglo-Indian army, in 1799, was—

Bengal, 53,140, including 7,280 Europeans; Madras, 48,839, including 10,157 Europeans; Bombay, 22,761, including 4,713 Europeans: total, 124,740; of these, 22,150 were Europeans. The above comprised—of her Majesty's troops, dragoons, four; infantry, eighteen—regiments. In May, 1804, the number of her Majesty's troops serving in India, was—cavalry, 2,072; infantry, 9,911 = 11,983. The number of troops has varied from time to time, according to the exigencies of war.

ANGLO-INDIAN ARMY—NUMBERS AND DISTINCTIVENESS. 533

regiments = 10,186; irregulars, thirty-four corps = 21,134; infantry regular regiments, 155 = 157,711; ditto irregular regiments, 53 = 39,613; veterans, or native invalid corps for garrison duties, 4,124 men. Among the natives, proportion of Mohammedans to natives, one to four. European commissioned offi-

cers, 5,142; warrant ditto, 243. Medical establishment—E. doctors, 824; native ditto, 652; apothecaries, &c., 287. Aggregate cost per annum, about £10,000,000. The army of each presidency is kept distinct under the governors and councils, but all under the control of the governor-general and council.

*Land Forces in 1854.\**

In India.	European Commissioned Officers.	European Warrant and Non-Com. and Rank and File.	Native Com., Non-Com., and Rank and File.	Total.
Queen's troops . . . . .	896	25,930	—	26,826
Company's troops, European . . . . .	588	14,061	—	14,649
"    "    Native . . . . .	3,644	3,122	233,699	240,465
Total . . . . .	5,128	43,113	233,699	281,940
Punjab subsidiary troops and contingents } from native states . . . . .	86	36	30,882	31,004
Police, militarily organised . . . . .	35	—	24,015	24,050
Grand total . . . . .	5,249†	43,149	288,596	336,994

The company's European and native troops are under the discipline of articles of war granted by parliament; the officers hold commissions under the sign-manual of the Queen, and have been recently authorised to rank in England on the same footing as H.M. troops of the line. The company is empowered to employ in India 20,000 European soldiers, irrespective of the Queen's troops, but not to have at one time in Britain more than 4,000 men.

The sepoy's of the Indian army consist of men of all castes and creeds: the Bengal troops, which are considered the highest caste, are recruited principally from Oude, Rajpootana, and the N. W. Provinces (a mixture of Hindoos and Mussulmen); the men are hardy, bold, powerful—good materials for soldiers: the Bombay force has its recruits from Oude, Deccan, Concan, &c. Hindoo, Moslem, Jew, and Portuguese, all contribute to make hardy, efficient troops, who will dig trenches (to which the Bengal soldiers object), and fight in them with as much courage as the Rajpoots. The Madras, like the Bombay troops, are termed "low caste," but quite equal to their compeers in any other part of India. It is said that the Bengal troops do not stand being "knocked about," or, in other words, "rough" it so well as the other divisions. In the Punjab force there are now many Seik soldiers. The pay and advantages of the three presidencies have been equalised: the sepoy's get a higher and more certain remuneration than is known in any other oriental service; and a scale of pensions is fixed adequate to native wants. The period of enlistment is fifteen years: no bounty

is paid; the service being popular, there is always abundant offers of recruits.

*The artillery*, horse and foot, is unrivalled by that of any European power, save in its draught cattle; bullocks and elephants being still partially employed for the siege or field artillery, which number about 400 guns. There are five brigades of horse artillery; twelve battalions of European foot artillery; and six battalions of native foot artillery. The horse artillery is considered the "crack" corps of the Anglo-Indian army. Its cadets at Addiscomb rank next to the *engineers*, the prize for which is obtained by those who attain the highest position after three years' hard study and competition;‡ the young engineers are subsequently instructed for a year at Chatham, along with the royal engineers, and are also required to possess a knowledge of the civil branch of their profession. Their pay and advantages are higher than those of the artillery, and their services much in request for the development of the resources of the country.

The cavalry is divided into two departments—the regular and irregular; the latter term being given to those corps where the trooper provides and feeds his own horse, and supplies his arms and equipments, for which he receives an allowance from the government of twenty rupees = 40s. a-month;§ in the regulars, the state provides the horse, arms, and clothing, and gives the soldier pay and batta for his subsistence—about nine rupees = 18s. a-month.

There are also regular and irregular infantry regiments, the difference consisting chiefly in the former and-neck struggle, reached the goal, and became Lieutenant Julius George Medley, of the Bengal engineers. He is now in a high and responsible position in the Punjab, a credit to the service, and a honour to his respected parent, the late William Medley, the eminent banker and financier, to whose generous and patriotic spirit several of the best of our monetary institutions (such as the *Provincial Bank of Ireland*, and the *Bank of British North America*) owe their origin.

§ The irregulars, whose numbers have recently been increased by the addition of twenty-eight regiments, making altogether 21,000 men, are very useful. Cavalry thus formed are not half the expense of a regular corps; the service is liked, the discipline is not strict—(it may be termed "free and easy")—there are more native and fewer European officers, and the men can march without baggage at a moment's warning.

\* House of Commons' Return, 17th April, 1855.

† In 1760, the number of European officers in the Bengal army was sixty; viz., nineteen captains, twenty-six lieutenants, and fifteen ensigns.

‡ As an illustration of the fairness with which the appointments are made, the following case may be cited. Sir Henry Willock, with commendable public spirit, placed a nomination to Addiscomb at the disposal of the Kensington Free Grammar School. Several youths started for the prize; it was given, after a hard contest, to a friendless youth whose competitors were all seniors to himself, and several of them possessed of family connections. The lad went to Addiscomb, and determined to stand for an engineer appointment: he worked hard night as well as day, knew no vacation, and soon outstripped cadets of older standing than himself; the second year he obtained the honour of the corporal's sword, and the third year, after a neck-

always receiving half a batta (3s. a-month), which is only allowed to the latter when on service or escort duty. This, however, is very often, as the transmission of treasure from one part of India to another gives employment annually to about 30,000 soldiers.

In the Punjab several Seik and other local corps have been organised since the disbandment of our former antagonists: among them is one called the *Guide corps*; it consists of both cavalry and infantry, officered by Europeans. Most of the wild or warlike tribes in Upper India are represented in its ranks; the men unite all the requisites of regular troops with the best qualities of guides and spies,—thus combining intelligence and sagacity with courage, endurance, soldierly bearing, and a presence of mind which rarely fails in solitary danger and in trying situations. Men habituated from childhood to war and the chase, and inured to all the dangers of a wild and mountainous border, are freely admitted into its ranks. To whatever part of Upper India the corps may be marched, it can furnish guides conversant with the features of the country and the dialect of the people: it is thus calculated to be of the most essential service in the quartermaster-general's department, as intelligencers and in the escort of reconnoitring officers.\* This excellent force was raised in 1846, at the suggestion of Colonel H. M. Lawrence, and was of great use in the second Seik war, and on other occasions. The corps has been recently augmented to 800 men, who receive rather higher pay than the ordinary soldiers.

Promotion is slow in the Indian army. In January, 1844, the Bengal artillery had ten colonels, whose period of service ranged from forty to fifty-three years; ten lieutenant-colonels, thirty-five to thirty-nine years; ten majors, thirty-one to thirty-five years; captains, eighteen to thirty years: engineers—four colonels, thirty-three to forty-eight years; four lieutenant-colonels, twenty-six to thirty-one years; four majors, twenty to twenty-six years; captains, fourteen to twenty years. Cavalry—ten colonels, twenty-four to forty-eight years; ten lieutenant-colonels, thirty-five to forty-two years; ten majors, twenty-five to thirty-five; captains, eighteen to twenty-four years: other ranks in proportion. Retirements are effected by the juniors purchasing out the seniors; that is, paying them a certain sum of money to induce them to retire on the pension due to their rank:† the money for this purpose is procured by loans from the Indian banks, for the security of which all officers below the party retiring are expected to become bound, or be "sent to

Coventry." This is said to be one of the causes of the pecuniary embarrassments which prevail among the juniors of the Indian army: the buying out of old officers is, however, deemed essential to efficiency; and it is proposed to legalise the procedure by act of parliament. A liberal spirit pervades all ranks; and a handsome provision is made for the children of brother-officers who die in India.‡

The Indian commissariat is well managed; the troops are continually on the move, well fed, attended and provided with hospital stores. The executive of this branch consists of a commissary-general, deputy, and joint-deputy ditto, first and second-class assistants, &c.—all Europeans, chosen from the company's European regiments. When an army takes the field, there are about three registered camp followers to each fighting man. The peace establishment of carriage cattle is large: of elephants, about 500; of camels, 5,000. Knapsacks, of forty pounds each, are carried for the men. A subaltern, on the march, is allowed one camel (which costs about three rupees a-month) to carry his baggage; other officers, of higher rank, in proportion. During war, a doolie or litter, with six bearers, is appointed to every twenty Europeans; among the native corps there are two doolies to each company. Supplies are procured by tenders and contract. The feeding of the troops is excellent; the sepoy gets two pounds of flour daily. Porter and ale are sent out from England for the canteens. Punkahs, to keep the air cool, are supplied to the barracks and hospitals; regimental libraries are established in European corps; and of late years (particularly during the command-in-chief of Sir William Gomm)§ large barracks, better bedding, improved ventilation, and plunging baths for daily ablution, have been adopted throughout India. By these and other judicious measures the mortality has been greatly diminished: recently, among European troops, it amounts to—for Madras, two; Bombay, three and a-half; Bengal, five and a-half—per cent. The invalids are heavy: to keep up 100 soldiers, it requires ten annually to supply the decrement by death, invaliding, discharges, and staff appointments. Each European soldier costs, when landed in India, not less than £100. The entire expense of her Majesty's troops serving in Hindoostan is defrayed from the Indian revenues. The discipline of the Anglo-Indian army is excellent,|| the *morale* good, and its efficiency as an armed force has been repeatedly proved.¶ It is said by some, that the cordial feeling between the European officer and

\* Report of Punjab Commissioners, 1851, p. 27.

† The buying-out amount varies: a senior captain or junior major of the Bombay artillery would receive £3,500 to £4,000 for retiring on his pension.

‡ In August, 1782, the Bengal army had reached a position to entertain, and subsequently to carry into effect, a project for the maintenance of the orphans of European officers; which is still in operation. A fund was provided by a monthly contribution, deducted from the pay of the several ranks under colonel, viz., subalterns and assistant-surgeons, three; captains and surgeons, six; and majors, nine—rupees each. Governors and managers were appointed by the subscribers, and the foundation laid of one of the most useful institutions in the East, which promptly and liberally at once received the support of the Indian government.—(*Original Papers*, &c.: London, 1784; 8vo. p. 56.)

§ This experienced officer, whose sanitary measures for the health of the troops in the West Indies I noticed in the volume containing that section, thus refers to the

same subject in a recent letter to me from Simla:—"With regard to improved barrack accommodation for the European troops, I may report to you at once very satisfactorily, the government has promptly attended to all my representations made to it with this view, and acceded invariably to all my requisitions made upon it in furtherance of this most desirable object. Thus the quarters at Peshawur, Rawul-Pindee, and Meean Meer, have been prepared with all practicable expedition; those of Umballa have been essentially improved; while at Ferozepoor and Cawnpoor (in healthy sites), an entirely new set of barracks have been recently sanctioned."

|| The number of officers dismissed from the service by sentence of court-martial, between 1835 and 1857 (inclusive), was—for Bengal, 47; Madras, 45; Bombay, 16 = 108: which is certainly not a large number among four or five thousand men during seventeen years.

¶ The Anglo-Indian officers are, as a class, superior in military knowledge to the junior officers of similar rank in the Queen's service.



his men does not now exist in the same degree as it did in the times of Clive and Coote, or even at a later period; but be this as it may in the regular regiments, there must be a considerable degree of attachment still prevailing in the "irregulars," where the few officers are so intimately dependent on the feelings of the men for their military success.

The nature of the climate, which renders the luxuries of the temperate zone absolute necessities,—the habits and caste of the people, which require several men to do the work that one would perform in Europe, and the wear and tear of life, make the Anglo-Indian army a heavy expense on the revenue. The following shows the comparative cost of a regiment of each arm of the service in India, Queen's and Company's:—Her Majesty's dragoons, eight troops—701 non-commissioned and rank and file, £79,680; native cavalry, six troops—500 native commissioned, non-commissioned, and rank and file, £34,840; brigade of horse artillery, consisting of three European troops and one native—341 European non-commissioned and rank and file, and 218 native commissioned, non-commissioned, and rank and file, including gun Lascars, £59,310; battalion of European foot artillery, consisting of four companies—336 European non-commissioned and rank and file, and 140 native commissioned and rank and file, gun Lascars, £31,020; battalion of native foot artillery, six companies—630 native commissioned, non-commissioned, and rank and file, £22,330; regiment of her Majesty's infantry, nine companies—1,068 non-commissioned and rank and file, £61,120; regiment of company's European infantry, ten companies—970 non-commissioned and rank and file, £52,380; regiment of native infantry, ten companies—1,160 native commissioned, non-commissioned, and rank and file, £25,670; regiment of irregular cavalry, of six *ressalahs*—584 native commissioned, non-commissioned, and rank and file, £18,770; regiment of local infantry, of ten companies—940 native commissioned, non-commissioned, and rank and file, £13,700.

In 1851, the total charges (including military buildings) of 289,529 soldiers, Europeans and natives, was £10,180,615, or £35 per head. The distribution of cost for the year 1849-'50, which differs but slightly from that of the year 1851, is thus shown:—Her Majesty's cavalry, £188,651; her Majesty's infantry, £771,148; engineers, £76,104; artillery, European and native, H. E. I. C., £576,318; regular native cavalry, £479,075; irregular, £728,247; company's Europeans, £175,954; regular native infantry, £2,880,054; irregular, £431,857; veterans, £128,257; medical department, £142,038; ordnance, £154,813; staff, £415,862; commissariat, £1,248,986; buildings and miscellaneous, £1,701,562. Grand total, £10,098,926.

Taking the number of the Anglo-Indian army, regulars and irregulars, at 330,000, of whom about 50,000 are Europeans, or one Englishman to about six natives, it cannot be considered a large force for the maintenance of peace, and the protection of a country which extends 18,000 miles from north to

south and from east to west, and comprises a population of about 200,000,000, of whom, not long since, ten men at least in every hundred were armed, and most engaged in some internecine strife, but now all subjected to the dominant sway of one power. Add to these considerations a land frontier of 4,500 miles, and the necessity of being at all times ready to repel invasion, and to preserve the mass of the people from plunder, and we may not be surprised at the extent, but at the smallness of the force employed on an area of about 1,500,000 sq. m.: the result shows one soldier to about 600† inhabitants; whereas, in France, there is one soldier to seventy inhabitants; Austria, one to seventy-two; Russia, one to sixty; Prussia, one to fifty-six. In most of the old civilised countries of Europe, the standing armies, in proportion to the population, are ten times larger than those of India. The garrison in and around Paris exceeds in number that of the European troops in all India.

The number of officers removed from regimental, and employed in civil and on detached duties, is large. In 1851, it consisted of—colonels, 37; lieutenant-colonels, 47; majors, 48; captains, 479; lieutenants, 400; cornets and ensigns, 29 = 1,040.‡ The complement of regimental officers in 1851, consisted—European infantry, one colonel, two lieutenant-colonels, two majors, twelve captains, twenty lieutenants, and ten ensigns; native infantry, one colonel, one lieutenant-colonel, one major, six captains, ten lieutenants, and five ensigns; cavalry, one colonel, one lieutenant-colonel, one major, six captains, eight lieutenants, and four ensigns.

It would seem advisable to organise an Indian staff corps—a civil department of the army—of a strength in accordance, from time to time, with the necessities of government. A good discipline, education, and moral training, under military surveillance, where the Christian principles predominate, is an effective school for preparing young and intelligent men for the exercise of their powers on a large scale. At present, owing to the want of civilians, the government is allowed to drain off one-third of the officers of the line; military men are extensively employed in political duties, and the regiments are denuded of their officers to an extent which often seriously damages the efficiency of the corps. Double the number of officers might be appointed to each regiment, and after they had passed examination in the native languages, and had served three years in regimental duties (as now prescribed), the option should be given of retiring from the military to the civil branch of the army, or for employment as magistrates, superintendents, electric telegraph, geological surveys, and in other functions, for which peculiar talents might qualify.

INDIAN NAVY.—There is a small maritime force under this designation, consisting of about thirty-three sailing and steam-vessels, which have rendered good service in the Persian Gulf during the China war, and in surveys of the Indian coasts and havens. The steamers are now chiefly employed as post-office

\* Parliamentary Evidence, 14th December, 1852, p. 9, of P. Melvill, the experienced chief of military dept.

† I do not take into account the irregular troops in the service of native states; they are very ineffective, unless when disciplined by English officers.

‡ Officers on furlough 30th April, 1851.—Military, private affairs, 146; sick certificate, 542 = 688. Medical, private affairs, 18; sick certificate, 93 = 111; total, 799. These figures do not include colonels of regiments,

of whom the number on furlough, in 1851, was—Bengal, 70; Madras, 50; Bombay, 29: total, 149. *Number of officers of each army employed, in 1851, on detached service, civil and political and military respectively.*—Bengal, civil and political, 151; military, 430. Madras, civil and political, 44; military, 208. Bombay, civil and political, 42; military, 165. Officers of engineers not included. A corps of civil engineers, trained for Indian service, would be useful.

packets between Bombay, Aden, and Suez. A few of these are of large burthen; the vessels are well armed, manned with Europeans and Lascars, and altogether thus officered:—One commodore, eight captains, sixteen commanders, sixty-eight lieutenants, 110 mates and midshipmen, fourteen pursers, and twelve captains' clerks: a surgeon, detached from the army, is placed on board the larger-sized vessels. The pay is good. Commodore, £250 a-month, with an official residence; post-captains, £80 to £90; commanders, £50 to £70; lieutenants, £12 to £15 (and £2 5s. a-month table money while afloat); pursers, £25 to £30; clerks, £5—a-month. Retiring pensions, after twenty-two years' service—captains, £360; commanders, £290; lieutenants and pursers, £190—*per annum*. The above ranks retiring from ill-health, after ten years' service, £200, £170, and £125 per annum. In 1852, there were fifty-three officers on retired list and nine on furlough. There is an excellent pilot establishment, maintained by government, at the Sand Heads, off the entrance of the Hooghly river, where it is much needed.

SUBSIDIARY AND PROTECTED STATES AND PENSIONARIES.—At pp. 5—12 will be found a tabular view of the states of India not under our immediate government, with their area, population, soldiery, and revenue. The British relations with protected states are entrusted to officers selected from either the civil or military services, according to their abilities, and denominated Residents, Governor-general's Agents, or Commissioners, as the case may be: at the larger political agencies there are European assistants to the Residents, who have, in some cases, charge of deposed princes. Practically speaking, the "Resident" is, or ought to be, a check on the native ruler when he does ill; a guide and supporter when he does well. Civil independence, with military superiority, is in reality a nullity; and although the Resident does not interfere, except in extreme cases, with the general administration of affairs, he expects to be consulted in the selection of a minister of state; and a system, founded on precedent, has grown to have almost the force of law, though a wide discretion is necessarily left to the

British functionaries, who have, by remonstrance and persuasion, rather than by direct interference, put down, in several states, *suttee*, infanticide, and other inhumanities. This system, which answered well at an earlier stage of our dominion, has now nearly outgrown the purposes for which it was designed. Power in the chief, without responsibility, has worked ill for the subject: relieved from external danger in war, and from internal rebellion caused by misgovernment,—indolence, sensuality, and crime found full scope; and we have been obliged to assume the duties of lord paramount where princes have died without heirs, or where it became a positive obligation to prevent the misery and ruin of the people of an entire kingdom.

The stipendiaries who receive annually political payments from the British government, are thus stated:—The King of Delhi (a lineal descendant of the Mogul emperors, but now totally divested of power), £150,000; Nabob of Bengal (a descendant of Meer Jaffier—*see* p. 291), £160,000; families of former Nabobs, £90,000; Nabob of the Carnatic (a descendant of a former Mohammedan viceroy), £116,540; families of former Nabobs of Carnatic, £90,000; Rajah of Tanjore (descendant of a petty military chief), £118,350; Rajah of Benares (a deposed Zemindar), £14,300; families of Hyder and Tippoo (both usurpers—*see* pp. 316-17—and bitter enemies of the English), £63,954; Rajahs of Malabar, £25,000; Bajee Rao (deposed Peishwa), £80,000; others of Peishwa's family, £135,000; various allowances, including political pensions, compensations, &c., £443,140: total, £1,486,284. It would certainly seem advisable to exercise some surveillance over the recipients of these large sums: most of them are usurpers and upstarts of yesterday, and really have no claim to these extravagant pensions; the more so, as in several cases these large annuities avail themselves of the means thus provided to bad lives of debauchery and idleness, pernicious to themselves and to all around. The main plea for the continuance of the pensions is the large families and harems of the stipendiaries.

## CHAPTER VI.

### FINANCE—INCOME AND EXPENDITURE—INDIAN DEBT—MONETARY SYSTEM.

DURING the early periods of our intercourse with India, the profits derived from commerce mainly furnished the means for maintaining the necessary establishments. After the acquisition of Bengal (1765), an income was derived from land, customs,

\* *Modern India*; by G. Campbell, B.C.S.: p. 150.

† The oppressive taxes levied by the Mohammedans have been abolished, including the inland transit dues. Among the exactions during the Mogul rule, which are not now collected, the following may be enumerated:—*Jesych*, or capitation tax, paid by Hindoos or other "infidels;" *meer behry*, port duties (probably similar to our custom duties); *kerrea*, exaction from each person of a multitude assembled to perform a religious ceremony; *gawshemary*, on oxen; *sirderukhty*, on every tree; *peish-cush*, presents; *feruk-aksam-peesheh*, poll-tax collected from every workman; *daroghaneh* (police); *teeseldary*

and such other sources as contributed to fill the exchequer of our Mohammedan predecessors.† Subsequent additions of territory furnished revenue to defray the charges attendant thereon: and thus, from time to time, the finances were enlarged.

(subordinate collector); *fotedary* (money-trier), taxes made for those officers of government; *wejeh keryeh*, lodging charges for the above officers; *kheryteh*, for money-hags; *scrafy*, for trying and exchanging money; *hassil baazar*, market dues; *nekass*, tax on the sale of cattle, and on hemp, blankets, oil, and raw hides; also on measuring and weighing, and for killing cattle, dressing hides, sawing timber, and playing at dice; *rahdary*, or passport; *pug*, a kind of poll-tax on salt, spirituous liquors, storax, and lime—on fishermen, brokerage, hearths, buyer and seller of a house, and other items comprised under the term of *serjerjehat*.—(See *Ayeen Akbery*, for details.)

**REVENUES AND CHARGES OF BENGAL, MADRAS, AND BOMBAY. 557**

*Revenues and Indian Charges\* (independent of home expenses) † of each Presidency.—At 2s. the Sicca Rupee.*

Years.	BENGAL.			MADRAS.				BOMBAY.		
	Revenue.	Charge.	Surplus.	Revenue.	Charge.	Surplus.	Deficit.	Revenue.	Charge.	Deficit.
	£	£	£	£	£	£	£	£	£	£
1814	11,237,498	8,876,581	2,360,917	5,322,164	5,189,412	132,752	—	857,080	1,717,144	860,064
1815	11,415,799	9,487,638	1,928,161	5,106,107	5,261,404	—	155,297	872,046	1,986,444	1,114,398
1816	11,967,259	9,796,974	2,170,285	5,360,220	5,142,553	217,667	—	896,592	1,946,118	1,050,526
1817	11,769,552	10,281,822	1,487,730	6,381,307	5,535,816	—	154,509	1,392,820	1,956,527	563,707
1818	12,399,475	10,677,015	1,722,460	5,361,432	6,006,420	—	644,918	1,720,537	2,597,776	877,239
1819	12,224,220	10,826,734	1,397,486	5,407,005	5,825,414	—	418,409	2,161,370	3,204,785	1,043,415
1820	13,518,968	10,688,439	2,830,529	5,403,506	5,700,466	—	296,960	2,438,960	3,299,170	860,210
1821	13,361,261	10,356,409	3,004,852	5,557,208	5,500,876	56,192	—	2,883,042	3,667,332	784,290
1822	14,169,691	10,817,196	3,852,495	5,585,209	5,229,202	356,007	—	3,372,447	4,275,012	202,567
1823	12,950,308	10,912,710	2,037,598	6,498,764	6,398,856	—	900,092	2,789,550	3,264,609	454,959
1824	13,484,740	12,620,179	864,561	5,460,742	5,789,333	—	348,591	1,785,216	3,305,982	1,520,765
1825	13,121,282	13,793,499	†	5,714,915	6,056,967	—	342,052	2,262,393	4,032,988	1,770,695
1826	14,767,238	13,405,152	1,362,086	5,981,681	5,634,322	347,359	—	2,618,549	4,000,552	1,382,003
1827	14,944,713	13,486,879	1,457,834	5,347,838	6,188,127	—	840,289	2,579,905	4,062,566	1,482,661
1828	10,125,416	7,747,834	2,377,582	3,591,272	3,671,111	—	79,839	1,300,311	2,421,715	1,121,404
1829	9,858,275	7,615,697	2,242,578	3,455,568	3,499,283	—	44,215	1,316,044	2,318,054	1,002,010
1830	9,883,892	7,340,650	2,543,242	3,415,759	3,388,628	27,131	—	1,304,300	2,218,637	914,337
1831	9,474,084	7,635,974	1,838,110	3,322,155	3,239,261	82,894	—	1,401,917	2,060,499	658,582
1832	9,487,778	7,687,229	1,800,549	2,969,956	3,174,347	—	204,391	1,497,309	2,034,710	537,401
1833	8,844,241	7,018,449	1,825,793	3,235,233	3,258,995	—	23,762	1,600,681	1,968,045	367,354
1834	9,355,289	7,322,303	2,032,986	3,368,948	3,017,676	351,272	—	1,503,782	1,908,092	404,310
1835	10,057,362	7,085,079	2,972,283	3,590,052	2,830,549	759,503	—	1,805,946	1,953,568	147,622
1836	10,263,012	6,944,973	3,318,039	3,235,117	2,817,533	417,584	—	1,704,213	1,980,763	276,550
1837	9,904,438	7,004,451	2,899,987	3,512,813	3,022,138	490,675	—	1,649,051	1,954,950	305,899
1838	10,375,426	8,070,634	2,304,792	3,533,803	3,082,652	451,151	—	1,418,464	1,940,729	522,265
1839	9,561,444	8,437,736	1,123,708	3,535,875	3,581,405	—	45,530	1,445,296	2,083,222	637,926
1840	9,741,240	8,943,099	798,141	3,563,343	3,352,075	211,268	—	1,827,922	1,966,380	138,458
1841	10,437,861	9,367,408	1,070,453	3,593,910	3,356,993	236,917	—	1,750,884	1,995,073	244,189
1842	10,829,614	9,934,751	894,863	3,628,949	3,380,783	248,166	—	1,960,683	1,991,530	30,847
1843	11,523,933	10,122,149	1,401,784	3,601,997	3,342,573	259,424	—	2,046,728	2,204,121	157,393
1844	11,861,733	9,575,683	2,286,050	3,512,417	3,479,580	32,837	—	1,918,607	2,496,173	577,566
1845	12,174,338	10,170,220	2,004,118	3,589,213	3,523,598	65,615	—	2,047,380	2,569,910	522,530
1846	12,900,254	10,445,969	2,454,285	3,631,922	3,449,618	182,304	—	2,120,824	2,662,100	541,276
1847	11,947,924	10,546,089	1,401,835	3,638,589	3,373,445	265,144	—	1,990,395	2,553,286	562,891
1848	12,083,936	10,536,367	1,547,569	3,667,235	3,221,495	449,740	—	2,475,894	2,929,520	453,626
1849	11,243,511	11,033,835	3,209,676	3,543,074	3,138,378	404,696	—	2,489,246	2,999,119	509,873
1850	13,879,966	10,818,429	3,061,537	3,625,015	3,212,415	412,600	—	2,744,951	3,086,460	341,519
1851	13,487,081	10,970,120	2,516,961	3,744,372	3,244,598	499,774	—	3,172,777	3,151,870	† 20,907
1852	14,015,120	11,239,370	2,775,750	3,766,150	3,307,192	458,958	—	3,166,157	3,279,118	112,961

\* In the above statement, from the year 1828, the allowances and assignments payable to native princes and others under treaties (amounting to upwards of a million and a-half per annum), and the charges of collecting the revenue, including the cost of the opium and salt (amounting to upwards of two millions and a-half more), have been excluded in order to arrive at the real produce of the revenue.

† In the tabular statement, down to the year 1827, the gross revenues are shown; and the rate of converting the Indian money into sterling is 16 per cent. higher than the rate at present used.

† The *Territorial Payments in England, in 1849-50* (latest return made up), were:—Dividends to proprietors of East India stock, £629,435; interest on the home bond debt, £173,723; purchase and equipment of steam-vessels, and various expenses connected with steam communication with India, £50,543; her Majesty's government, on account of the proportion agreed to be borne by the company of the amount payable under contract between her Majesty's government and Peninsular and Oriental Steam Navigation Company for an extended communication with India and China, £70,000; transport of troops and stores, deducting freight charged in invoices, £36,418; furlough and retired pay to military and marine officers, including off-reckonings, £614,393; payments on account of her Majesty's troops serving in India, £200,000; retiring pay to her Majesty's troops (Act 4 Geo. IV., c. 71.) including an arrear, £75,000.

*Charges, general,* comprising:—Board of Commissioners for the Affairs of India; salaries of the president and officers of the board, including superannuation allowances granted by warrant of the Crown under Act 53 Geo. III., cap. 155, sec. 91, £30,523; salaries of the Court of Directors, £7,600; contingent expenses of the Courts of Directors and Proprietors, consisting of repairs to the East India House, taxes, rates, and tithes, coals, candles, printing, stationery, bookbinding, stamps, postage, and various petty charges, £28,829; salaries and allowances of the secretaries and officers of the Court of Directors, deducting amount applied from the fee fund in part payment thereof, £93,794; annuities and pensioners, including compensation annuities under Act 3 & 4 Will. IV., cap. 55, and payments in commutation thereof, £198,199; Haileybury College, net charge, £9,074; military seminary at Addiscombe, net charge, £4,057. Recruiting charges: pay of officers, non-commissioned officers of recruiting establishments, and of recruits previous to embarkation, bounty, clothing, arms, and accoutrements, £43,438; passage and outfit of recorder, Prince of Wales' Island, Bishop of Madras, aides-de-camps, chaplains, company's officers in charge of recruits, officers in her Majesty's service proceeding to join their regiments, and volunteers for the pilot service, &c., £22,655; charges of the store department, articles for use in inspection of stores, labour, &c., £5,201; Lord Clive's fund, net payment for pensions, &c., £36,519; law charges, £12,215; cultivation and manufacture of cotton, &c. in India (expenses incurred in view to the improvement of), £547; commission to agents at the outports on realisation of remittances, £260; maintenance of lunatics, £6,466; miscellaneous—consisting of expenses of overland and ships' packets, maintenance of natives of India, donation to the Bengal Civil Fund and to widows' funds for the home service, donations for services and relief, &c., £7,657. Interest paid upon sums deposited by Great Indian Peninsula Railway Company, £1,722; East Indian Railway Company, £2,983; absentee allowances to civil servants of the Indian establishments, £32,383; annuities of the Madras Civil Fund of 1818, £15,383; retired pay and pensions of persons of the late St. Helena establishment, not chargeable to the Crown, £5,795. The total territorial payments, including invoice value of political stores (£378,100), and some small items not above enumerated, was £2,750,937.

‡ Deficit of £852,217. § In this and following years, the receipts and charges of Sindh are included in Bombay.

¶ In this and following years, the revenues and charges of the Punjab are included in Bengal. ¶ Surplus.

558 RECEIPTS AND DISBURSEMENTS OF INDIAN REVENUE—1852-'3.

The receipts for the year 1852-'53, were—Land-tax, £15,365,000. Sayer (stamps, &c., on land) and *abkarree* (excise on spirituous liquors), £1,185,000; *moturpha* (tax on houses, shops, trades, and professions),\* £118,000; salt, £2,421,000; opium, £5,088,000; custom or import duties, £1,430,000; stamp duties, £491,000; post-office receipts, £200,000; mint ditto, £150,000; tobacco, £63,000; tributes and subsidies, £571,000; miscellaneous (comprising arrears of revenue, marine and pilotage dues), £1,522,000: total gross receipts, £28,610,000.

The disbursements for the same year were—Interest on India and home bond debt, £2,503,000; charges defrayable in England, viz., dividends to proprietors of E. I. stock, £650,000; E. I. House and India Board establishments, half-pay and pensions, stores, &c., £2,697,000; army and military charges, £9,803,000; judicial establishments, £2,223,000; land revenue collection and charges, £2,010,000; general charges and civil establishments, £1,928,000; opium charges and cost of production, £1,370,000; salt, ditto, £350,000; marine (including Indian navy, pilot service, lighthouses, &c.), £376,000; post-office, £213,000: customs—collecting import duties, £189,000; mints, £60,000; stamps, £32,000; miscellaneous (including *sayer*, excise, *moturpha*, public works, &c.), £4,223,000: total charges, £27,977,000.

THE INDIAN DEBT requires a brief elucidation: it was originally created to meet the temporary wants of commerce, and subsequently those of territory; money was borrowed in India, in such emergencies, at high rates of interest. In April, 1798, the debt amounted to £8,500,000; † of this, £1,300,000 was at twelve, £4,000,000 at eight, £1,700,000 at six—per cent.; the remainder at various lesser rates, or not bearing interest.

In April, 1803, the debt stood at £17,700,000; of which £10,200,000 was at eight, £3,000,000 at ten, £600,000 at twelve—per cent.; remainder as above.

In April, 1804—debt, £21,000,000; of which £3,000,000 at ten, £1,200,000 at nine, £12,000,000 at eight—per cent.; remainder as above.

In April, 1834—debt (exclusive of home bond), £35,000,000; in April, 1850, £47,000,000; in 1855, about £50,000,000. Annual interest of debt, at five and four per cent., about £2,000,000.

There is a home India debt, which has been created from time to time to meet deficiencies in remittances required for home charges: it now amounts to about £2,500,000.

Proportion of debt due to Europeans and to natives, in 1834—Europeans, £20,439,870; natives, £7,225,360 = £27,665,230. In 1847, Europeans, £21,981,447; natives, † £12,271,140 = £34,252,587.

The India debt has been mainly caused by war: ‡ that with the Burmese cost, from 1824 to 1826, at least £13,000,000. The debt was augmented by it from £26,468,475 to £39,948,488, or £13,500,000. During the ten years from 1839-'40 to 1848-'49 (which was almost uninterruptedly a period of warfare in Afghanistan, Sindh, the Punjab, and Gwalior), the aggregate charges exceeded the revenues of India by £15,048,702, showing an annual deficiency of £1,500,000.

There was a nominal reduction of the debt between 1830 and 1834, by an alteration of the high rates of exchange, previously used, to the rate of two shillings the sicca rupee, adopted after the passing of the act 3 and 4 William IV., ch. 85: by this the debt appeared reduced from £39,948,488 in 1830, to £35,463,488 in 1834. There was a real reduction to £29,832,299, between 1834 and 1836, by the application to that purpose of a portion of tea sales and other commercial assets, derived from a winding up of the mercantile business of the E. I. Cy. The progress of the debt bearing interest in India is thus shown:—

Years.	Value.	Years.	Value.	Years.	Value.
	£		£		£
1834	35,463,483	1841	32,051,088	1848	43,085,263
1835	33,984,654	1842	34,378,288	1849	44,204,080
1836	29,832,299	1843	36,322,819	1850	46,908,064
1837	30,406,246	1844	37,639,829	1851	47,999,827
1838	30,249,893	1845	38,627,954	1852	48,014,244
1839	30,231,162	1846	38,992,734	1853	49,043,526
1840	30,703,778	1847	41,798,087	1854	—

There is in India, as well as in England, a constant tendency to increased expenditure. In fifteen years the augmentation stood thus:—

Years.	Total Revenue.	Charges.		Debt.	
		India.	England.	India.	Home.
	£	£	£	£	£
1834-'35	18,650,000	16,650,000	2,160,000	35,460,000	3,523,237
1849-'50	25,540,000	23,500,000	2,700,000	47,000,000	3,899,500

This increase has taken place in addition to £8,122,530|| appropriated from commercial assets, in 1834, towards liquidation of India debt, and £1,788,522 applied to reduction of home bond debt: total £9,911,055; and notwithstanding a reduction in the interest of the India debt from six and five to five and four per cent. An annual deficit of upwards of a million sterling, for about a quarter of a century, does not appear satisfactory, and requires

not merely vigilance to keep down expenditure, but still more, the utmost efforts to raise revenue by increasing the paying capacities of the people. Assuming the British India population at 130,000,000, and the annual revenue at £28,000,000, the contribution per head is about fifty-two pence each per annum. A people in prosperous circumstances would yield much more than four shillings and fourpence each yearly.

\* This tax, a relic of the Moslem system, still exists at Madras: its abolition is under consideration.

† Instead of giving rupees, which perplex an English reader, I give the sum, converted into sterling, at 2s. the rupee.

‡ Between 1834 and 1846, the sums invested by Indian princes in the India debt, has been—King of Oude, £1,200,000; rajah of Mysoor, £84,000; Bajee Rao,

£50,000; rajah of Gurhwal, £10,000; Chimna, Indore, £25,000; Pretaup Sing, Tanjore, £6,000.

§ During the present year (1855), a five per cent. loan has been created, to be applied solely to the extension of public works. In November, 1840, a similar proposition was submitted by the author to the E. I. Cy.

|| Of this sum, £2,677,053 constituted the principal of the Carnatic debts.

The debt due to the E. I. Cy. is provided for. In 1834 the sum of £2,000,000 was set apart from the commercial assets of the company to be invested in the English funds (three per cents.), and to accumulate at compound interest, at forty years (until 1722), in order to pay off the E. I. Cy's. stock of £6,000,000,\* at the rate of £200 for every £100 stock; making the total amount to be liquidated in 1874, £12,000,000. In May, 1852, the £2,000,000 had increased, by the annual reinvestment of three per cent. int., to £3,997,648.

The tangible commercial property sold under the act of 1834, realised £15,223,480, which was thus disposed of:—£8,191,366 towards discharge of India debt; £2,218,831 was applied in payment of territorial charges in England; £1,788,525 was applied in liquidation of part of home bond debt; £2,000,000 was paid into the Bank of England, for investment in the funds, to provide a "security fund," at compound interest, for the ultimate redemption of the capital stock of the company (£6,000,000) in 1874; £561,600 was applied in compensations to ship-owners and other persons; and the remainder, of £463,135, was retained in London, as an available cash balance for the purposes of government in India. The unavailable assets claimed as commercial by the company—viz., the India House in Leadenhall-street, one warehouse retained for a military store department, and house property in India,—the whole, valued at £635,445,—remains in the hands of the company, but applicable to the uses of the Indian government.†

MONETARY SYSTEM.—Silver is the standard of value: the coins in circulation are—the rupee of silver, value two shillings; the anna of copper, three-halfpence; and the pice, a base metal, whereof twelve represent one anna.

The rupee contains 165 grains of fine silver, and fifteen grains of alloy: when silver is worth five shillings per ounce, its value is one shilling and tenpence farthing; the average rate of remittance, by hypothecation, from India, has been at the rate of one shilling and elevenpence three farthings; bullion remittances have averaged one shilling and tenpence, four per cent. over the metallic value of the rupee. It is usually converted into sterling, approximately, for nominal purposes at two shillings.

Gold coins, termed pagodas and mohurs, are now seldom seen. There are no means of ascertaining the amount of the circulating medium, in metal or in paper: government possess no returns on the subject. The quantity of specie (value in rupees) issued from the mints, in several years, has been:—

Mints.	Gold.	Silver.	Copper.
	Rupees.	Rupees.	Rupees.
Calcutta, 1847-'48 . . .	10,286	12,158,939	35,116,331
" 1848-'49 . . .	46,980	15,211,580	47,724,328
" 1849-'53, 4yrs. }	151,299	84,534,529	116,571,391
Madras, 1848-'53, avg. }	—	3,271,189	6,159,671
of the 5 years }	—	—	—
Bombay, avg. of same }	—	17,264,598	{ none
period . . . . . }	—	—	{ coined.
Total . . . . .	208,565	132,440,835	205,571,721

\* This capital consisted originally, on the union of the two companies in 1708, of £3,200,000 (see p. 230); between 1787 and 1789, this sum was increased to £4,000,000; from 1789 to 1793, to £5,000,000; and from 1793 to 1810, to £6,000,000.

† Evid. of Sir J. C. Melville.—(Parl. Papers; May, 1852.)

‡ An admirable memoir of this distinguished Indian statesman, and selections from his valuable papers, have

PUBLIC BANKS IN INDIA.—Until within the last few years, there was only one public joint-stock bank (*Bengal*) in India. This institution owed its formation, at the commencement of the present century, to the financial ability of the late Henry St. George Tucker,‡ and was eminently successful. In 1829-'30 I proposed and assisted at the organisation of the *Union Bank of Calcutta*. It was soon taken out of my hands by the leading merchant bankers, who used its capital and credit to prop up their insolvent firms: it did not, however, prevent their failure for £20,000,000 sterling, leaving a dividend of not many pence in the pound. The *Union Bank* held its ground for a few years, but it ultimately fell with another great crash of Bengal traders, and was then ascertained to have been, for the last few years of its existence, a gigantic swindle.

In conjunction with Sir Gore Ouseley and other friends, I tried to establish in London an East India Bank, which should act as a medium of remittance between Britain and India. The government and several members of the E. I. Cy. were favourable, but private interests, connected with individual banking and agency, were too powerful at the E. I. House. A charter offered was clogged with restrictions which would defeat the object in view; and after an expenditure of several thousand pounds, and five years of untiring perseverance, the project was abandoned, when I went to China, in her Majesty's service, in March, 1844. Since then a local bank, formed at Bombay, established a branch in London—has now its head-quarters (*Oriental Bank*) there, with branches in India and China, and appears to be doing a large and profitable business. Acting on my suggestions, banks were established at Bombay and Madras, on the same governmental basis as that of Bengal; their notes being received as cash by government, and remittance operations prohibited. There are now about a dozen public banks in India, whose aggregate capital is only about £5,000,000: but no returns of their position are made to the E. I. House. There are numerous governmental treasuries in different parts of India. To meet current expenses, and to provide against contingencies, large cash balances are kept there. In 1852, the coin ready for emergencies was £12,000,000.§

The Hindoos have no joint-stock banks among themselves; the *shroffs*, or money-changers, issue *hoondees*, or bills of exchange, which are negotiable according to the credit of the issuer; the leading *shroffs* in the principal towns correspond not only with their brethren in all parts of India, but also in the large cities of Asia, and even at Constantinople: by this means important European intelligence was wont, before the establishment of communication by steam, to be known among the natives in the bazaar at Calcutta, long before the government received official tidings.

been recently prepared by Mr. J. W. Kaye, who has attained a high reputation as a biographer.

§ In June, 1855, the assets of the general treasuries was—Bengal, 15,200,000 rupees; Madras, 2,000,000; Bombay, 9,200,000 = 26,400,000 rupees, of which 22,300,000 was in specie. The assets of each of the three governmental banks was, in April, 1855—B. Bengal, 27,682,636 rupees; B. Madras, 6,062,163 rupees; B. Bombay, 12,077,566 rupees. Excess of assets over liabilities of each, 10,863,264 rupees; 2,996,958 rupees; 5,340,480 rupees. Coin in these three banks, 10,660,000 rupees. Bank notes outstanding, 17,500,000 rupees. Government bills and debentures, 6,400,000 rupees.

## CHAPTER VII.

### COMMERCE—IMPORTS—EXPORTS—SHIPPING—VALUABLE PRODUCTS—CAPABILITY OF GREATLY INCREASED TRAFFIC.

THE commerce of India has, for many ages,\* been deemed of great value; but considering the extent and resources of the country, it was not until recently carried on with England to any large extent. In 1811-'12, our dominion was firmly established in Hindoostan, and there was general peace: a contrast between that year and 1851-'2, will show its progress in forty years:—

Total Commerce.	1811-'12.	1851-'52.
Value of merchandise imported } from the United Kingdom . . }	£ 1,300,000	£ 9,300,000
Ditto from other countries . . .	160,000	3,100,000
Total Imports . . . .	1,460,000	12,400,000
Merchandise exported to the } United Kingdom . . . .	1,500,000	7,100,000
Ditto to other countries . . . .	600,000	12,700,000
Total Exports . . . .	2,100,000	19,800,000

Thus, exclusive of bullion, coin, or treasure, there has been, in merchandise alone, an increase of imports from £1,460,000 to £12,400,000, and of exports, from £2,100,000 to £19,800,000. The treasure transit, at the two periods, has been:—1811-'12—imported, £230,000; exported, £45,000: 1851-'52—imported, £5,000,000; exported, £910,000. The shipping of all nations entering at the two periods,

\* Three hundred years before the Christian era the India trade was a tempting prize to Alexander, and it continued to be an object of solicitude to Europe and to Asia. In 1204, the Venetians, assisted by the soldiers of the fourth crusade, obtained possession of Constantinople, and retained the occupation for fifty-seven years, mainly by the advantages of Indian commerce: these were, in the 13th and 15th centuries, transferred to their rivals the Genoese (whose colonies extended along the Euxine and towards the Caspian), in return for assistance given to the Greeks. The Venetians then entered into a treaty with the Mohammedans, and conducted their commerce with the East *via* Egypt and the Red Sea. The discovery of a maritime route by the Cape of Good Hope, destroyed the overland trade by Egypt and Asia Minor. The construction of a ship canal through the isthmus of Darien, would give a fresh stimulus to the commerce of the East.

† For many years, great commercial injustice was done by England to British India. High, indeed prohibitory, duties were laid on its sugar, rum, coffee, &c., to favour similar products grown in the West Indies: still worse, we compelled the Hindoos to receive cotton and other manufactures from England at nearly nominal duties (two and a-half per cent.), while, at the very same time, fifty per cent. were demanded here on any attempt to introduce the cotton goods of India.—(See Commons Parl. Papers; No. 227, April, 1846; called for, and printed on the motion of one of the oldest and most independent members, Edward Stillingfleet Cayley, M.P. for N. R. Yorkshire.) The same principle was adopted in silk and other articles: the result was the destruction of the finer class of cotton, silk, and other manufactures, without adopting the plan of Strafford, in Ireland, during the reign of Charles I.—namely, the founding of the linen trade as a substitute for that of woollen, which was extinguished in order to appease the English hand-loom weavers. To remedy the

was—1811-'12, 600,000 tons; 1851-'2, 1,700,000 tons.

In 1811, it was gravely asserted before parliament, by several witnesses, that the trade of India could not be extended; that it was not possible to augment the consumption of British manufactures; and that the people of Hindoostan had few wants, and little to furnish in exchange. The answer to this is an extension from one to nine million worth. Yet the trade of India is still only in its infancy; and but for the unjust prohibitions† to which for many years it was subjected in England, it would now probably be double its present value. Assuming the population of all India at 200,000,000, including about 60,000 Europeans, and the exports of our merchandise at £10,000,000,‡ there is a consumption of only one shilling's worth per head. Our exports to the United States of America, in 1854, amounted to £21,400,000, or, for 25,000,000 inhabitants,§ about seventeen shillings per head of the population; to Australia, for 700,000 persons, to £12,000,000, or about £17 per head during a year of diminished trade. Even the negro population in the West Indies, under one million in number, take off nearly £2 sterling per head of British produce; and the colonists of British America, £5 each yearly. The exports from the United Kingdom to India, in the year 1854, already, however, equal in amount those sent in the same year to France (£3,175,290), Spain

evil of treating India as a foreign state, I appealed to the common sense of the nation, through the public press, to a select committee of parliament, by voluminous evidence, and, aided by Sir Charles Forbes and other eminent merchants, on 11th May, 1842, carried the principle of the following motion in the General Court of Proprietors of the E. I. Cy., as the sequel of a resolution laid before the Court on the previous 22nd December, "praying that parliament, in the exercise of justice and sound policy, will authorise the admission of the produce and manufactures of British India into the ports of the United Kingdom, on reciprocal terms with the produce and manufactures of the United Kingdom when imported into British India—that East India vessels be entitled to the privileges of British shipping, and that the produce of subsidiary states, whose maritime frontiers we have occupied, be treated as that of British India."—(See *Asiatic Journal* for January, 1842.) "That in the opinion of this Court, the territories under the government of the E. I. Cy. ought to be treated as integral portions of the British empire; and that as a revision of the English tariff is now taking place, this Court, in fulfilment of its duty to their fellow-subjects in British India, do again petition both houses of parliament, praying for a complete reciprocity of trade between India and England, which, if fully and fairly established, will confer mutual and extensive benefits on both countries, and materially contribute to the security and permanence of the British power and influence in the eastern hemisphere."—(See debate thereon in *Asiatic Journal*, May, 1842.) The late Sir R. Peel admitted the injustice, and adopted measures for its redress, which merged into the low import system, by a misnomer designated *free trade*, which does not exist with any country.

‡ In 1854, £10,025,969.

§ Census of 1850, 23,351,207, including 3,178,000 slaves.

(£1,270,064), Portugal (£1,370,603), Sardinia (£1,054,513), Lombardy (£635,931), Naples (£563,033), Tuscany (£505,852), Papal States (£149,865), Denmark (£759,718), Sweden and Norway (£736,808).

The export of British manufactures and produce to India ought to amount to at least twenty shillings per head, which would be equal to £200,000,000 sterling, or twice the value of our present exports to

\* Export of British and Irish produce and manufactures to every part of the world, in 1854—£97,298,900.

† India could supply cotton for all Europe. For some years experiments have been made, and considerable expense incurred, by sending out seed from America, and American agents to superintend the culture and cleaning: no corresponding result has ensued; the main elements of skill, energy, and capital are still wanting. Western and Central India, especially the provinces of Guzerat and Berar, afford the best soils and climate for the plant; but roads, railways, and river navigation are needed; and it is a delusion to think that India can rival the United States until they are supplied. With every effort that government and individuals have made since 1788, when the distribution of cotton-seed commenced, the import of cotton wool from India was, in 1851, no more than 120,000,000 lbs.—not one-seventh of the United States' supply. Improvement of the navigation of the Godavery and other rivers, will probably cause an extension of production. *Silk* has long formed an article of Indian commerce: it was probably introduced from China, but was not largely produced until the middle of the 18th century, when the E. I. Co. sent (in 1757) a Mr. Wilder to Bengal,—urged the planting of the mulberry; and granted, in 1765, reductions of the rents of lands where attention was paid to the culture of the tree, and in 1770—'75, introduced the mode of winding practised in Italy and other places. When Napoleon, in 1808, stopped the exportation of silk from Italy to England, the Court made successful exertions to furnish large supplies of filature wound in Bengal, and to augment the supply of silk goods, which is an increasing trade. An unlimited quantity of the raw and manufactured material can be produced in India. *Wool* of every variety, from fine down adapted to the most beautiful fabrics, to the coarse, wiry, and long shaggy hair which makes excellent carpets, is procurable, and now exported to the extent of several million lbs. annually. The plateau and mountain slopes of India sustain vast herds of sheep in a favourable climate, with abundant pasture. It is a trade susceptible of great development. *Indigo* is a natural product of many parts of India. Until the close of last century, Europe derived its chief supplies from South America and the West Indies. About 1779, the Court of Directors made efforts to increase the production by contracting for its manufacture. In 1786, out of several parcels consigned to London, one only yielded a profit: the aggregate loss of the company was considerable. Improvements took place in the preparation of the dye: and, in 1792, the produce of Bengal was found superior to that of other countries; in 1795, the consignments amounted to 3,000,000 lbs. Several civil servants of government established indigo factories; private Europeans came into the trade; capital was advanced by the merchant bankers of Calcutta, who sometimes lost heavily, and sometimes acquired immense gains. Happily, low duties were levied in England, and the cultivation and manufacture largely augmented, and now it is spread over about 1,200,000 acres of land in Bengal and Bahar, employing 50,000 families, and requiring an annual outlay of more than a million and a-half sterling. *Sinde* is now becoming a competitor with Bengal, and is said to have the advantage of immunity from heavy rains, which wash the colour from the leaves when ready to be cut. *Sugar* is an indigenous product of India; it was carried from thence into Sicily, the south of Europe, the Canaries, and subsequently to

every part of the world.\* Let not this be deemed an extravagant assertion: the capacity of Hindoostan to receive our goods is only limited by that which it can furnish in return; and, happily, the country yields, in almost inexhaustible profusion, wherever capital has been applied, all the great staples which England requires, such as wheat, rice, sugar, coffee, tea, cotton, silk, wool, indigo, flax and hemp, teak, and timber of every variety;† tallow,

America; and the cane is grown in every part of India, and its juice used by all classes. For many years the export to England was discouraged by the imposition of high duties to favour the West India interest; and in 1840, I was under examination for several days before a select committee of the House of Commons, adducing evidence of the necessity of admitting East India on the same terms as West India sugar into the United Kingdom. The quantity exported has increased of late years, but again fallen off. In the year ending June 30th, 1855, the sugar imported from the East Indies amounted to 739,144 cwt.; Mauritius, 1,237,678 cwt.; West Indies, 3,139,209; foreign produce, 3,117,665 = 8,233,696 cwt. Duty received, £5,330,967. Average price of Muscovado, for the year, per cwt.—East Indies, 23s. 4d.; Havannah, 22s. 9d.; British West Indies, 20s. 11d.; Mauritius, 20s. 2d. Thus it will be perceived, that the imports from all India are little more than one-half of the small island of Mauritius, and that the price is higher (despite labour wages at 1½d. a-day) than in any other country. The consumption of sugar in the United Kingdom, in the year ending 30th June, 1855, was—8,145,180 cwt.—=912,260,160 lbs., which, for 27,000,000 people, shows 34 lbs. per head annually, or about 10 oz. a-week for each individual. In the *Taxation of the British Empire*, published in 1832, when the consumption was only about 5 oz. a-head weekly, I endeavoured to demonstrate that by reducing the duty, and extending the market of supply, the consumption would be doubled; which has taken place: now, by affording encouragement to sugar cultivation in India, the consumption in the United Kingdom would probably increase to at least 1 lb. a-week per head. The *tea* shrub has been found growing wild in Assam, and contiguous to several of the lower slopes of the Himalayas: it delights in sheltered valleys, the declivities of hills, or river banks with a southern exposure, as in Gurhwal, Kumaon, and at Katmandoo (Nepaul), where a plant ten feet high has been seen. In 1788, it was announced officially that this remarkable herb was indigenous to India; but no attempts were made to encourage the cultivation, lest the China trade should be disturbed. In 1835, Lord Wm. Bentinck brought the subject under the notice of the E. I. Co. and of the public; a committee of investigation was appointed, who decided in favour of an experimental culture. In 1839, an Assam tea company was incorporated in London, with a capital of £500,000; the directors went to work energetically, and have spent £200,000, a large part of which, however, was wasted. Experience has been dearly bought; but under the able supervision of Mr. Walter Prideaux, a large crop is at present secured, and annually increasing. The tea crop for three years, in Assam, amounted to—in 1852, 271,427 lbs.; in 1853, 366,687 lbs.; in 1854, 478,258 lbs. The yield of 1855 is expected to realise £50,000, and the expenditure half that sum. The Assam tea is of excellent quality, so also is that of Kumaon. By perseverance and judgment, we may hope to be less dependent on China for this now indispensable and cheering beverage. *Coffee*, a native of Yemen (Arabia), has long been naturalised in India: it is grown, of excellent quality, in Malabar, Tellicherry, Mysoor, and other contiguous places. *Tobacco* was introduced in 1605, during the reign of Akber,—is now cultivated in every part, and in general use; but as a commercial article, is inferior to the American weed. Care only is required to produce the finest qualities. This is the case at Chunar on the Ganges, Bhilsa near Nagpoor

hides and horns, vegetable oils, tobacco, peppers, cardamoms, ginger, cassia, and other spices, linseed, saltpetre, gum and shell-lac, rum, arrack, caoutchouc and gutta-percha, canes or rattans, ivory, wax, various dyes and drugs, &c.

These constitute the great items of commerce; and the demand for them in Europe is immense—in fact, not calculable: 200,000,000 Europeans could consume twenty times the amount of the above-mentioned products that are now supplied; 200,000,000 Hindoos would consume, in exchange, an equal proportion of the clothing, manufactures, and luxuries from the Woodanum in the Northern Circars, in the low islands at the mouth of the Kistna (from which the famed Masulipatam snuff is made), in the delta of the Godavery, in Guzerat, near Chinsurah, Bengal, at Sandoway in Arracan, and at other places. The Court of Directors procured from America the best seed from Maryland and Virginia, which has thriven well. Tobacco requires a fertile and well-manured soil. The best fields at Sandoway, Arracan, show on analysis—iron (peroxyde), 15.65; saline matter, 1.10; vegetable fibre, 3.75; silic, 76.90; alumina, 2; water and loss, 60 = 100. *Flax and Hemp* are furnished by India in larger varieties than from any other country in the world. The *sun*, properly cured and dressed, is equal to Russian hemp; other varieties are superior, as they bear a strain of 200 to 400 lbs.; while that of St. Petersburg breaks at 160 to 200 lbs.; the *kote-kangra* of the Punjab is equal to 400 lbs.; *jute* is also excellent; the *khair*, made from cocoa-nut husk fibres, is used principally for maritime purposes, as the specific gravity is lighter than sea-water, in which it does not decay like hemp. Any amount of plants adapted for cordage, coarse cloths, and the manufacture of paper (for which latter there is a greatly increasing demand throughout the civilised world), are procurable in India. *Linseed* was only recently known to abound in India, and is now shipped annually to the extent of many thousand tons. The greater part of the oil-cake used for fattening cattle in Britain is derived from the fields of Hindoostan. *Salt* is supplied in Bengal by evaporating the water of the Ganges, near its mouth, and by boiling the sea-water at different parts of the Bay of Bengal; at Bombay and Madras, solar evaporation is used. This indispensable condiment is found pure in different parts of the interior; the Sambhur Lake, in Rajpootana, supplies it in crystals of a clear and fine flavour, when the water dries up during the hot season. The Punjab contributes a quantity of rock-salt, from a range of hills which crosses due west the Sinde-Saugor Dooab; it is found cropping out in all directions, or else in strata commencing near the surface, and extending downwards in deep and apparently inexhaustible fecundity. The mineral, which requires no preparatory process but pounding, can be excavated and brought to the mouth of the mine for two annas (three-pence) the maund (80 lbs.); it is of excellent flavour and purity,—of transparent brilliancy and solid consistency; when, as is sometimes the case, veins of iron lie adjacent to the saline strata, it assumes a reddish hue. In this latter respect the salt of the cis-Indus portion of the range differs from that obtained in the trans-Indus section. Common bay-salt is made in many adjacent localities, and in all parts of the country the ground is occasionally impregnated with a saline efflorescence resembling saltpetre. In the Alpine principality of Mundeë an impure salt is produced, but it is strongly mixed with earthy ingredients. In Sinde, a coarse kind of salt is everywhere procurable in large quantities; some ship-loads have been sent to Bengal, and sold well. *Saltpetre* (nitre) is derived from the soil of Bengal, Oude, and other places; the average quantity annually exported is about 20,000 tons. Sulphate of soda (glauber-salts), is found near Cawnpore; carbonate of soda, at Sultanpoor, Ghazeepoor, and Tirhoot; and other salines are procurable, in various places, to any required extent. *Rice*,—widely grown in Bengal, Bahar, Arracan, Assam, Sinde, and other low districts,

western hemisphere. The tariff of India offers no impediment to the development of such barter: internal peace prevails, there are no transit duties, land and labour abounds; but capital and skill are wanting. How these are to be supplied,—how Britain is to be rendered independent of Russia or of the United States for commercial staples,—how such great advantages are to be secured,—how India is to be restored to a splendour and prosperity greater than ever before experienced,—I am not called on to detail. Let it suffice for me to indicate the good to be sought, and desire earnestly its successful attainment. and also at elevations of 3,000 to 5,000 feet along the Himalayas and other places, without irrigation, where the dampness of the summer months compensates for artificial moisture. Bengal and Patna rice are now, by care and skill, equal to that of Carolina, though the grain is not so large; that from Arracan and Moulmein is coming extensively into use. Pegu will also probably furnish considerable supplies. *Wheat*, from time immemorial, has been a staple crop on the plains of Northern India, in the Punjab, Nepal, and other places. The soil is well fitted for this cereal, but owing to defective cultivation, the crops are not good: it is, however, the main food of many millions in Hindoostan; and yet, a few years since, when I placed a small sack of excellent Indian wheat on the table of the Court of Proprietors of the E. I. House, while urging its admission into England at a low rate of duty, it was viewed with astonishment, it being generally supposed that rice was the only grain in the East. *Oils*,—that expressed from the cocoa-nut is the most valuable, especially since it has been converted into candles. This graceful palm thrives best on the sea-coast, the more so if its roots reach the saline mud, when it bears abundantly at the fourth year, and continues to do so for nearly 100 years, when it attains a height of about 80 feet. The planting of the cocoa-nut is considered a meritorious duty. *Castor-oil* is extensively prepared for burning in lamps, as well as for medicinal purposes. *Rose oil* (*attar of roses*) is produced chiefly at Ghazeepoor on the Ganges, where hundreds of acres are occupied with this fragrant shrub, whose scent, when in blossom, is wafted along the river a distance of seven miles. Forty pounds of rose-leaves in 60 lbs. of water, distilled over a slow fire, gives 30 lbs. of rose-water, which, when exposed to the cold night air, is found in the morning to have a thin oleaginous film on the surface. About 20,000 roses = 80 lbs. weight, yields, at the utmost, an ounce and a-half of attar, which costs at Ghazeepoor 40 rupees (£4.) Purity tested by the quick evaporation of a drop on a piece of paper, which should not be stained by the oil. *Opium*,—this pernicious drug is extensively prepared in Bahar (Patna) and Malwa. The cultivation of the poppy (from whose capsule the poisonous narcotic is obtained) began to attract attention in 1786; the trade was fostered as a means of obtaining a public revenue, there being a great demand in China, where its use has rapidly increased within the last forty years, and hastened the decay of the Tartar government of that vast country. The Patna drug is procured by the Anglo-Indian government making advances of money to the cultivators, and stipulating for a certain amount at a fixed price; that of Malwa yields a revenue by transit-permits on its passage to Bombay. The revenue to the state, from both these sources, is upwards of five million sterling. Among the timber woods may be mentioned—teak, sandal-wood, mango, banian, dhak, babool, different kinds of oak, pine, holly, maple, plane, ash, horse-chesnut, juniper, teodar or Himalayan cedar, fir, sál, sissoo, peon, michelia, syzygium, arbutus, bay, acacia, beech, chesnut, alnus, sappan-wood, cassia, toon, cedar, laurel (four to six feet in diameter), mulberry, willow, tulip-tree, indigo-tree, bamboo, and a variety of other timber adapted for ship and house-building. In the Madras Presidency alone there are upwards of a hundred different kinds of timber, and about 500 specimens have been collected from Nepal and the Ultra-Gangetic country



Table of the Imports and Exports between the several Presidencies of British India and the United Kingdom and other Countries, in each Year, since 1834.

Years.	MERCHANDISE.					TREASURE.					MERCHANDISE AND TREASURE.										
	Bengal.		Madras.		Bombay.		United Kingdom.		Other Countries.		Total Merchandise.		Bengal.		Madras.		Bombay.		Total.		
	Rupees.	Rs.	Rupees.	Rs.	Rupees.	Rs.	Rupees.	Rs.	Rupees.	Rs.	Rupees.	Rs.	Rupees.	Rs.	Rupees.	Rs.	Rupees.	Rs.	Rupees.	Rs.	
1834-35	1,991,307	50,320,900	1,758,685	3,015,268	3,015,268	3,015,268	4,933,473	7,993,342	10,633,770	2,183,082	19,474,407	4,158,985	99,248,555	3,037,770	8,186,610	2,852,693	6,154,129	2,643,283	5,751,912	2,591,527	10,633,770
1835-36	2,170,613	47,232,855	2,139,510	3,135,416	3,135,416	3,135,416	4,781,478	10,464,655	11,064,655	3,152,289	20,811,093	5,593,961	3,482,329	3,482,329	11,261,684	3,482,329	6,923,129	3,397,400	7,245,529	4,158,985	11,261,684
1836-37	2,782,965	59,702,776	2,157,060	3,835,042	3,835,042	3,835,042	5,638,092	11,474,800	7,261,158	3,000,018	26,330,340	6,954,315	3,939,087	3,939,087	11,171,999	3,939,087	7,245,529	3,939,087	3,939,087	5,418,548	11,171,999
1837-38	2,463,950	60,392,338	1,964,423	3,210,693	3,210,693	3,210,693	4,821,107	11,274,464	10,434,378	9,371,908	34,790,538	7,000,432	3,939,087	3,939,087	13,559,142	3,939,087	7,245,529	3,939,087	3,939,087	5,777,062	13,559,142
1838-39	2,682,132	64,740,021	1,964,423	3,210,693	3,210,693	3,210,693	4,821,107	11,274,464	10,434,378	9,371,908	34,790,538	7,000,432	3,939,087	3,939,087	13,559,142	3,939,087	7,245,529	3,939,087	3,939,087	5,777,062	13,559,142
1839-40	3,341,915	68,330,971	1,806,337	4,289,482	4,289,482	4,289,482	6,240,160	12,529,522	12,744,664	14,011,742	50,200,174	8,000,432	3,939,087	3,939,087	14,869,696	3,939,087	7,245,529	3,939,087	3,939,087	6,240,160	14,869,696
1840-41	4,559,075	76,893,328	2,052,522	6,014,398	6,014,398	6,014,398	8,415,905	14,948,042	14,146,091	12,744,664	49,290,033	7,000,432	3,939,087	3,939,087	16,173,128	3,939,087	7,245,529	3,939,087	3,939,087	8,415,905	16,173,128
1841-42	4,262,101	67,853,268	2,157,060	3,835,042	3,835,042	3,835,042	5,638,092	11,474,800	14,146,091	12,744,664	49,290,033	7,000,432	3,939,087	3,939,087	16,173,128	3,939,087	7,245,529	3,939,087	3,939,087	8,415,905	16,173,128
1842-43	3,915,858	65,222,637	1,657,412	3,347,490	3,347,490	3,347,490	4,881,774	10,299,886	12,148,653	12,148,653	38,108,074	6,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
1843-44	4,474,426	66,222,637	1,657,412	3,347,490	3,347,490	3,347,490	4,881,774	10,299,886	12,148,653	12,148,653	38,108,074	6,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
1844-45	5,039,902	104,688,940	1,758,685	3,015,268	3,015,268	3,015,268	4,933,473	7,993,342	10,633,770	2,183,082	19,474,407	4,158,985	99,248,555	3,037,770	8,186,610	2,852,693	6,154,129	2,643,283	5,751,912	2,591,527	10,633,770
1845-46	5,232,267	84,938,134	1,964,423	3,210,693	3,210,693	3,210,693	4,821,107	11,274,464	10,434,378	9,371,908	34,790,538	7,000,432	3,939,087	3,939,087	13,559,142	3,939,087	7,245,529	3,939,087	3,939,087	5,777,062	13,559,142
1846-47	5,313,429	88,180,041	2,052,522	6,014,398	6,014,398	6,014,398	8,415,905	14,948,042	14,146,091	12,744,664	49,290,033	7,000,432	3,939,087	3,939,087	16,173,128	3,939,087	7,245,529	3,939,087	3,939,087	8,415,905	16,173,128
1847-48	4,657,164	97,666,641	2,049,075	5,790,284	5,790,284	5,790,284	8,383,638	14,834,442	14,146,091	12,744,664	49,290,033	7,000,432	3,939,087	3,939,087	16,173,128	3,939,087	7,245,529	3,939,087	3,939,087	8,415,905	16,173,128
1848-49	4,856,144	94,800,720	2,049,075	5,790,284	5,790,284	5,790,284	8,383,638	14,834,442	14,146,091	12,744,664	49,290,033	7,000,432	3,939,087	3,939,087	16,173,128	3,939,087	7,245,529	3,939,087	3,939,087	8,415,905	16,173,128
1849-50	5,232,101	90,600,046	1,411,074	3,757,890	3,757,890	3,757,890	5,323,097	9,272,097	11,568,888	11,568,888	18,948,812	3,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
1850-51	6,115,204	89,788,231	1,545,574	3,829,792	3,829,792	3,829,792	5,323,097	9,272,097	11,568,888	11,568,888	18,948,812	3,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
1851-52	7,087,406	90,644,558	1,424,664	3,722,625	3,722,625	3,722,625	5,323,097	9,272,097	11,568,888	11,568,888	18,948,812	3,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
1852-53	4,993,748	81,053,311	1,424,664	3,722,625	3,722,625	3,722,625	5,323,097	9,272,097	11,568,888	11,568,888	18,948,812	3,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
1853-54	4,092,436	88,611,079	1,424,664	3,722,625	3,722,625	3,722,625	5,323,097	9,272,097	11,568,888	11,568,888	18,948,812	3,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
Exports.																					
1834-35	4,092,436	88,611,079	1,424,664	3,722,625	3,722,625	3,722,625	5,323,097	9,272,097	11,568,888	11,568,888	18,948,812	3,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
1835-36	5,537,967	1,124,126,935	4,447,793	3,975,038	3,975,038	3,975,038	7,133,111	11,064,655	6,655,994	5,655,994	16,133,164	20,811,093	5,593,961	3,482,329	11,261,684	3,482,329	6,923,129	3,397,400	7,245,529	4,158,985	11,261,684
1836-37	6,688,821	1,327,888,009	5,273,113	4,915,479	4,915,479	4,915,479	8,822,473	13,241,832	13,241,832	13,241,832	20,811,093	6,954,315	3,939,087	3,939,087	13,559,142	3,939,087	7,245,529	3,939,087	3,939,087	5,418,548	13,559,142
1837-38	6,765,760	1,062,085	3,511,956	4,353,221	4,353,221	4,353,221	6,266,190	11,474,800	10,434,378	9,371,908	34,790,538	7,000,432	3,939,087	3,939,087	13,559,142	3,939,087	7,245,529	3,939,087	3,939,087	5,777,062	13,559,142
1838-39	6,739,625	1,024,828	3,396,265	4,531,593	4,531,593	4,531,593	6,266,190	11,474,800	10,434,378	9,371,908	34,790,538	7,000,432	3,939,087	3,939,087	13,559,142	3,939,087	7,245,529	3,939,087	3,939,087	5,777,062	13,559,142
1839-40	8,006,058	1,244,658	2,853,520	5,959,519	5,959,519	5,959,519	8,599,237	13,862,574	12,744,664	12,744,664	49,290,033	7,000,432	3,939,087	3,939,087	16,173,128	3,939,087	7,245,529	3,939,087	3,939,087	8,415,905	16,173,128
1840-41	8,006,058	1,244,658	2,853,520	5,959,519	5,959,519	5,959,519	8,599,237	13,862,574	12,744,664	12,744,664	49,290,033	7,000,432	3,939,087	3,939,087	16,173,128	3,939,087	7,245,529	3,939,087	3,939,087	8,415,905	16,173,128
1841-42	8,006,058	1,244,658	2,853,520	5,959,519	5,959,519	5,959,519	8,599,237	13,862,574	12,744,664	12,744,664	49,290,033	7,000,432	3,939,087	3,939,087	16,173,128	3,939,087	7,245,529	3,939,087	3,939,087	8,415,905	16,173,128
1842-43	7,363,357	1,209,191	2,481,625	4,119,484	4,119,484	4,119,484	6,704,692	10,299,886	12,148,653	12,148,653	38,108,074	6,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
1843-44	9,931,098	1,209,865	1,615,372	3,582,907	3,582,907	3,582,907	5,323,097	9,272,097	11,568,888	11,568,888	18,948,812	3,000,432	3,939,087	3,939,087	15,244,417	3,939,087	7,245,529	3,939,087	3,939,087	6,173,128	15,244,417
1844-45	9,822,197	1,641,627	5,126,526	7,246,197	7,246,197	7,246,197	9,943,489	17,253,372	17,253,372	17,253,372	26,330,340	7,000,432	3,939,087	3,939,087	16,173,128	3,939,087	7,245,529	3,939,087	3,939,087	8,415,905	16,173,128
1845-46	9,815,679	1,112,172	5,801,805	6,694,433	6,694,433	6,694,433	10,369,927	16,950,424	39,075,434	6,595,533	46,524,435	11,064,655	3,482,329	11,261,684	3,482,329	6,923,129	3,397,400	7,245,529	4,158,985	11,261,684	
1846-47	9,234,393	1,211,616	4,604,973	6,511,686	6,511,686	6,511,686	8,843,510	13,355,375	13,355,375	13,355,375	20,811,093	6,954,315	3,939,087	3,939,087	13,559,142	3,939,087	7,245,529	3,939,087	3,939,087	5,418,548	13,559,142
1847-48	7,961,971	1,271,256	4,072,436	5,683,267	5,683,267	5,683,267	8,242,830	13,312,370	90,500,711	21,422,626	30,672,434	1,426,696	8,869,282	4,379,947	14,733,343	4,379,947	7,245,529	3,939,087	3,939,087	6,173,128	14,733,343
1848-49	9,038,639	1,271,256	4,072,436	5,683,267	5,683,267	5,683,267	8,242,830	13,312,370													

564 MARITIME PROGRESS OF CALCUTTA, MADRAS, AND BOMBAY.

Number and Tonnage of all Vessels entered and cleared at the Ports in each Presidency—1840 to 1852 :—

Years.	Entered.		Cleared.		Total.		Years.	Entered.		Cleared.		Total.								
	Ves.	Tons.	Ves.	Tons.	Ves.	Tons.		Ves.	Tons.	Ves.	Tons.	Ves.	Tons.							
<b>BENGAL</b>																				
1840	686	234,808	689	233,300	1,375	468,108	1840	19,322	444,435	19,173	469,301	38,495	913,736							
1841	913	295,596	882	279,688	1,795	575,284	1841	19,864	578,716	15,051	462,226	34,915	1,040,942							
1842	655	231,672	725	263,436	1,380	495,108	1842	19,237	611,271	16,980	477,539	36,217	1,088,810							
1843	772	254,519	813	271,754	1,585	526,273	1843	20,529	527,626	19,201	589,836	39,730	1,117,462							
1844	729	252,491	773	267,058	1,502	519,549	1844	19,227	524,850	20,485	574,206	39,712	1,099,056							
1845	1,045	282,674	1,052	292,315	2,097	574,989	1845	17,274	494,469	19,856	689,969	37,130	1,184,438							
1846	996	274,634	1,024	289,587	2,020	564,221	1846	18,143	530,011	14,610	430,929	32,753	960,940							
1847	1,117	332,688	1,108	326,972	2,225	659,660	1847	18,199	559,276	19,201	592,777	37,400	1,152,053							
1848	862	308,347	845	301,157	1,707	609,504	1848	24,441	685,165	21,487	652,265	45,928	1,337,430							
1849	1,020	349,614	1,046	362,290	2,066	711,904	1849	29,714	804,193	28,981	779,241	58,695	1,583,434							
1850	1,033	356,502	1,029	357,799	2,062	714,301	1850	32,126	804,956	33,130	829,873	65,256	1,634,829							
1851	998	393,322	980	373,330	1,978	766,652	1851	36,706	867,514	37,694	893,005	74,400	1,760,519							
1852	839	433,739	811	414,795	1,650	848,534	1852	42,241	907,447	42,218	908,328	84,459	1,815,775							
<b>MADRAS</b>																				
1840	5,879	371,644	6,727	427,872	12,606	799,516	<b>TOTALS</b>													
1841	6,271	368,924	6,781	432,474	13,052	801,398	1840	25,887	1,050,887	26,589	1,130,473	52,476	2,181,360							
1842	6,016	400,728	6,476	441,808	12,492	842,536	1841	27,048	1,243,236	22,714	1,174,388	49,762	2,417,624							
1843	5,580	375,375	6,790	479,046	12,370	854,421	1842	25,908	1,243,671	24,181	1,182,783	50,089	2,426,454							
1844	6,181	430,295	7,292	490,588	13,473	920,883	1843	26,881	1,157,520	26,804	1,340,636	53,685	2,498,156							
1845	6,495	456,854	7,818	533,564	14,313	990,418	1844	26,137	1,207,636	28,550	1,331,852	54,687	2,539,488							
1846	6,168	475,038	7,405	534,935	13,573	1,009,973	1845	24,814	1,233,997	28,726	1,515,848	53,540	2,749,845							
1847	5,868	448,712	6,531	486,316	12,399	935,028	1846	25,307	1,279,683	23,039	1,255,451	48,346	2,535,134							
1848	5,711	441,891	7,108	528,781	12,819	970,672	1847	25,184	1,340,676	26,840	1,406,065	52,024	2,746,741							
1849	5,876	439,807	7,693	549,573	13,569	989,380	1848	31,014	1,435,403	29,440	1,482,203	60,454	2,917,606							
1850	5,813	488,800	7,780	620,465	13,593	1,109,265	1849	36,610	1,593,614	37,720	1,691,104	74,330	3,284,718							
1851	5,136	435,153	6,687	557,409	11,823	992,612	1850	38,972	1,650,258	41,939	1,808,137	80,911	3,458,395							
1852	5,787	490,276	7,184	620,948	12,971	1,111,224	1851	42,840	1,695,989	45,361	1,823,794	88,201	3,519,783							
							1852	48,867	1,831,462	50,213	1,944,071	99,080	3,775,533							

Shipping entering these Ports between 1802 and 1835.

Years.	Calcutta.		Madras.		Bombay.		Total.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
1802-'3	520	150,154	1,476	149,571	105	49,022	2,101	348,748
1803-'4	594	171,229	1,851	198,218	143	62,635	2,588	432,032
1811-'12	601	151,224	5,826	267,888	79	32,161	6,506	451,273
1812-'13	527	148,866	6,691	410,894	139	54,953	7,357	614,653
1823-'24	498	139,773	8,094	485,297	122	52,720	8,714	677,790
1824-'25	539	157,039	5,642	305,422	129	54,239	6,310	616,700
1830-'31	475	134,805	5,157	262,127	149	60,379	5,781	457,311
1831-'32	492	110,767	4,885	255,296	145	56,051	5,459	422,114
1832-'33	478	121,544	4,826	256,344	165	71,929	5,469	449,827
1833-'34	830	183,471	5,031	318,417	170	69,803	6,031	571,691
1834-'35	648	164,455	5,012	306,727	181	73,175	5,841	544,387
1835-'36	522	151,019	5,379	311,694	204	75,830	6,105	538,543

Number and Tonnage of Vessels of each Nation entered and cleared at Ports in British India, since 1850-'51.

Nationality of Vessels.	Entered.						Cleared.					
	1850-'51.		1851-'52.		1852-'53.		1850-'51.		1851-'52.		1852-'53.	
	Ves.	Tons.	Ves.	Tons.	Ves.	Tons.	Ves.	Tons.	Ves.	Tons.	Ves.	Tons.
UNDER—												
British Colours . . .	1,861	682,762	1,778	683,179	1,789	722,035	2,339	754,254	2,202	726,807	2,277	820,707
American . . . . .	67	33,299	74	34,888	89	57,207	66	33,860	79	33,782	37	24,358
Arabian . . . . .	296	36,623	230	32,461	252	37,476	430	45,621	259	43,841	284	36,491
Austrian . . . . .	—	—	1	522	1	425	—	—	1	566	—	—
Belgian . . . . .	—	—	—	—	3	1,380	—	—	—	—	3	1,380
Bhownugger . . . .	—	—	—	—	—	—	—	—	1	176	—	—
Bombay . . . . .	—	—	121	6,691	154	7,632	—	—	219	12,027	240	12,208
Bremen . . . . .	—	—	6	2,845	4	1,165	—	—	1	573	1	600
Burmese . . . . .	—	—	—	—	—	—	—	—	—	—	1	220
Danish . . . . .	4	1,328	2	1,070	6	2,274	4	1,171	2	1,338	4	2,071
Dutch . . . . .	6	2,284	3	1,790	6	3,232	7	2,469	2	1,474	4	1,969
French . . . . .	139	42,682	146	44,210	263	65,647	148	47,548	176	57,031	295	66,606
Hamburg . . . . .	5	1,668	9	4,179	3	875	3	836	4	1,489	6	2,681
Norwegian . . . .	—	—	—	—	1	350	—	—	—	—	—	—
Portuguese . . . .	130	2,039	234	4,179	179	3,692	180	3,171	238	3,772	168	3,463
Russian . . . . .	—	—	3	1,682	4	1,348	1	475	1	356	—	—
Sardinian . . . .	—	—	—	—	1	504	—	—	—	—	1	504
Spanish . . . . .	1	405	—	—	—	—	1	800	—	—	—	—
Swedish . . . . .	6	1,358	6	2,456	10	3,339	6	2,012	3	1,023	8	4,045
Turkish . . . . .	—	—	—	—	1	650	—	—	—	—	—	—
Native . . . . .	36,424	822,692	40,181	842,610	46,019	859,566	38,716	893,076	42,122	905,824	46,821	919,722
Steamers . . . . .	33	23,118	46	33,224	82	62,665	38	22,794	51	33,665	63	47,046
<b>Total . . . . .</b>	<b>38,972</b>	<b>1,650,258</b>	<b>42,840</b>	<b>1,695,989</b>	<b>48,867</b>	<b>1,831,462</b>	<b>41,939</b>	<b>1,808,137</b>	<b>45,361</b>	<b>1,823,744</b>	<b>50,213</b>	<b>1,944,071</b>

Anglo-Indian Army.—Total Number of Europeans and Natives employed in all India, from the Year 1800.

Years.	Europeans.	Natives.	Total.	Years.	Europeans.	Natives.	Total.	Years.	Europeans.	Natives.	Total.
1800	22,832	115,300	138,132	1817	31,056	195,134	226,190	1834	32,310	155,556	187,866
1801	23,012	132,864	155,876	1818	32,161	211,079	243,240	1835	30,822	152,938	183,760
1802	24,341	122,506	146,847	1819	29,494	215,878	245,372	1836	32,733	153,306	186,039
1803	24,930	115,211	140,141	1820	28,645	228,650	257,295	1837	32,502	154,029	186,531
1804	23,042	155,671	178,713	1821	28,914	228,068	256,982	1838	31,526	153,780	185,306
1805	24,891	167,674	192,565	1822	29,065	216,175	245,240	1839	31,132	176,008	207,140
1806	26,445	156,421	182,866	1823	30,933	206,799	237,732	1840	35,604	199,839	235,443
1807	26,460	153,623	180,083	1824	30,585	212,842	243,427	1841	38,406	212,616	251,022
1808	29,798	151,120	180,918	1825	30,423	246,125	276,548	1842	42,113	212,624	254,737
1809	31,387	154,117	185,504	1826	30,872	260,273	291,145	1843	46,726	220,947	267,673
1810	31,952	157,262	189,214	1827	32,673	240,942	273,615	1844	46,240	216,580	262,820
1811	34,479	166,665	201,144	1828	34,557	224,471	259,028	1845	46,111	240,310	286,421
1812	33,835	165,622	199,457	1829	35,786	207,662	243,448	1846	44,014	240,733	284,747
1813	34,171	165,900	200,071	1830	36,409	187,067	223,476	1847	44,323	247,473	291,796
1814	31,651	162,787	194,438	1831	35,011	161,987	196,998	1848	44,270	220,891	265,161
1815	31,611	195,572	227,183	1832	34,767	158,201	192,968	1849	47,893	229,130	277,022
1816	32,399	198,484	230,883	1833	33,785	156,331	190,116	1850	49,280	228,448	277,728
								1851	49,408	240,121	289,529

East India Banks.\*

Name.	Date of Establishment.	Capital.		Notes in Circulation.	Specie in Coffers.	Bills under Discount.
		Subscribed.	Paid up.			
Bank of Bengal . . . . .	1809	£1,070,000	£1,070,000	1,714,771	851,964	125,251
" of Madras <sup>b</sup> . . . . .	1843	300,000	300,000	123,719	139,960	69,871
" of Bombay <sup>c</sup> . . . . .	1840	522,500	522,500	571,089	240,073	195,836
Oriental Bank <sup>d</sup> . . . . .	1851 <sup>e</sup>	1,215,000	1,215,000 <sup>f</sup>	199,279 <sup>g</sup>	1,146,529	2,918,399
Agra and U. S. Bank <sup>h</sup> —head office, Calcutta	1833	700,000	700,000	—	74,362	—
N. W. Bank <sup>i</sup> —head office, Calcutta	1844	220,560	220,000	—	—	—
London and Eastern Bank . . . . .	1854	250,000	—	325,000	—	—
Commercial Bank <sup>k</sup> —head office, Bombay	1845	1,000,000	456,000	—	—	—
Delhi Bank <sup>l</sup> —head office, Delhi . . . . .	1844	—	180,000	—	—	—
Simla Bank . . . . .	1844	—	63,850	—	—	—
Dacca Bank . . . . .	1846	30,000	—	—	—	—
Mercantile Bank <sup>m</sup> —head office, Bombay	—	600,000	328,826	777,156 <sup>n</sup>	77,239	109,547
Bank of Asia . . . . .	1853 <sup>o</sup> -4	—	—	—	—	—
India, China, & Australian Bank . . . . .	—	—	—	—	—	—

\* The accounts of most of these banks are vague and unsatisfactory, there is a mystification which renders it difficult to ascertain their solvency. <sup>b</sup> Last dividend, 8 per cent. <sup>c</sup> Last dividend, 9 per cent. <sup>d</sup> Last dividend, 10 per cent. <sup>e</sup> Corporation date of charter, 30th of August, 1851. <sup>f</sup> At 27th Sept., 1855. <sup>g</sup> Bills of exchange and promissory notes not bearing interest. <sup>h</sup> A lending bank; and from its accounts in June, 1855, I can derive no definite view of its assets and liabilities. <sup>i</sup> Branches.—Agra, Madras, Lahore, Canton, and London. <sup>j</sup> Branches.—Bombay, Simla, Missouri, Agra; and they draw on Delhi and Cawnpore. <sup>k</sup> Agents in London, Calcutta, Canton, and Shanghai. <sup>l</sup> Agents in London, Calcutta, Bombay, and Madras. <sup>m</sup> Branches.—London, Calcutta, Colombo, Kandy, Canton, and Shanghai. Last dividend, 8 per cent. <sup>n</sup> Drafts and bills in circulation.

COMMERCIAL TARIFF OF INDIA.—The chief provisions of the tariff of 1855 may be thus stated:—British imports—Cotton and silk piece goods and manufactures, woollens, marine stores, metals, porter, beer, ale, cider, and similar fermented liquors, and all manufactured articles not named, 5; foreign imports of above, 10—per cent. Cotton thread, twist, and yarn, British, 3½; foreign, 7—per cent. Bullion and coin, grain, coal, ice, horses and other animals, free. Books, British, free; foreign, 3 per cent. Coffee, 7½ per cent. Alum, camphor, cassia, cloves, coral, nutmeg and mace, pepper, vermillion, and tea, 10 per cent. Spirits (London proof), 1 rupee 8 annas per imperial gallon; wine and liqueur, 1 rupee per imperial gallon. There are a few export duties: viz., indigo, 3 rupees per maund (about 82 lbs.); lac, 4 per cent.; silk wound, 3 annas; silk, raw flature, 3½ rupees per seer; sugar and rum to foreign ports, 3 per cent.; tobacco, 4 annas per maund. These duties refer to Bengal: there is little difference at Bombay and Madras, except in the export dues. With regard to salt, the duty on import into Bengal, is 2 rupees 8 annas per maund of 80 tolas; at Madras, 12 annas per maund; at Bombay, free; salt exported from Bombay to Madras, pays ½ anna per maund; salt exported to Malabar, Cochin, and Travancore, 1 anna per maund; and it may be exported free to foreign or British ports not in India or Ceylon. Salt exported to Bengal pays excise duty, but receives credit for amount in adjustment of local duty. The shipper exporting salt to Madras has to give security for payment of full duty failing to produce certificate from place of import. All port-to-port trade throughout British India, except in the articles of salt and opium, was rendered free by Act 6 of 1848, and Act 30 of 1854.

COINS, WEIGHTS, AND MEASURES.—Bengal Coins.—2 double = 4 single pysa; 12 pie small = 1 anna; 16 annas = 1 rupee; 16 rupees = 1 gold mohur. When accounts are kept in sicca rupees, they use the imaginary pie of twelve to an anna. Small shells, called cowries, are also made use of for paying coolies, &c., which are reckoned as follows: viz., 4 cowries = 1 gunda; 20 gundas = 1 pun; 5 puns = 1 anna. These rates vary from time to time. Gold and Silver Weights.—1 punkhos or quarter grain = 1 gram or dhan; 4 dhans = 1 ruty; 6 3-8ths ruty = 1 anna; 8 ruty = 2 massa; 100 ruty, or 121 massa or 16 anna = 1 tola or sicca rupees; 1061 ruty, or 13, 28, 152 massa, or 17 annas = 1 gold mohur. A gold mohur weighs 722 and nine-tenths troy weight, containing 187,651 fine gold and 17,051 alloy. A sicca rupee weighs 7, 11 and two-thirds ditto, containing 175,928 fine silver and 15,993 alloy. Cloth Measure.—3 corbe = 1 anguala; 3 anguala = 1 gharia; 8 gharias = 1 haut, or cubit, 18 inches; 2 haut = 1 guz or yard.

MEMORANDUM SHOWING THE STATE AND PROSPECTS OF RAILWAYS IN INDIA UP TO JULY, 1857.—3,648 miles of railway have been sanctioned, and are in course of construction, viz.:—By the East Indian Railway Company, from Calcutta to Delhi, with branches from Burdwan to Raneeungee, and from Mirzapore to Jubbulpore, 1,400 miles.—By the Madras Company, from Madras to the Western Coast at Beynore, 430 miles; and—From Madras, via Cuddapah and Bellary, to meet a line from Bombay at or near the river Krishna, 310 miles.—By the Great Indian Peninsula Company, from Bombay to Callian 33 miles, with extensions.—North East to Jubbulpore, to meet the line from Mirzapore, with a branch to Oomrawtee and Nagpore, 818 miles; and—South East, via Poonah and Sholapore, to the Krishna River, to meet the line from Madras, 357 miles.—By the Sinde Company, from Kurrachee to a point on the Indus, at or near to Kotree, 120 miles; and—By the Bombay, Baroda, and Central India Company, from Surat to Baroda and Ahmedabad, 160 miles.

*Land Revenue in British India, since 1789 (to show its progress.)*

	1789-90.	1799-1800.	1809-10.	1819-20.	1829-30.	1834-35.	1839-40.	1844-45.	1850-51.	1851-52.	1852-53.	1853-54.
<b>BENGAL, BIHAR, AND ORISSA:—</b>												
Revenues, Current . . . . . S. Rs.	2,56,05,200	2,33,67,056	2,60,82,136	2,71,99,225	2,63,26,188	2,25,75,674						
Balances . . . . . do.	9,67,989	31,82,947	11,45,267	22,71,617	31,64,538	60,14,331						
Not in Jumma . . . . . do.	1,19,021	2,13,569	39,267	4,37,171	4,61,383	4,13,656						
Miscellaneous . . . . . do.	1,42,996	38,422	81,645	1,36,059	4,03,506	11,55,723						
<b>Total . . . . .</b>	<b>2,68,38,206</b>	<b>2,68,01,994</b>	<b>2,73,51,275</b>	<b>3,00,44,072</b>	<b>3,03,56,245</b>	<b>3,01,59,384</b>						
<b>BYNARS:—</b>												
Revenues, Current . . . . . S. Rs.	36,24,823	32,63,420	37,44,142	43,80,451	43,15,612							
Balances . . . . . do.	3,34,241	4,28,287	1,27,108	36,038	5,92,891							
Not in Jumma . . . . . do.	—	45,138	59,271	39,207	56,296							
<b>Total . . . . .</b>	<b>40,19,064</b>	<b>37,36,845</b>	<b>39,30,521</b>	<b>44,55,716</b>	<b>49,24,709</b>							
<b>BENGAL.—Ceded and Conquered Provinces:</b>												
Revenues, Current, Ceded, Provinces S. Rs.	—	—	1,40,27,596	1,89,23,863	1,21,83,716							
Do. . . . . Conquered do. do.	—	—	30,83,338	1,14,51,287	1,56,63,394	3,53,20,976						
Balances . . . . . do.	—	—	14,38,594	7,22,104	11,28,581	39,54,551						
Do. . . . . do.	—	—	10,70,981	6,21,800	12,29,239	47,021						
Not in Jumma . . . . . do.	—	—	41,503	1,84,081	47,021	8,35,556						
Do. . . . . do.	—	—	1,02,941	1,37,184	5,30,387	75,856						
Miscellaneous . . . . . do.	—	—	46,704	1,31,216	1,08,010	2,28,566						
Do. . . . . do.	—	—	2,17,582	65,738	1,08,010	—						
<b>Total . . . . .</b>	<b>—</b>	<b>—</b>	<b>2,60,29,499</b>	<b>3,15,37,273</b>	<b>3,09,37,204</b>	<b>3,79,77,701</b>						
<b>MADRAS.—Ancient Possessions:*</b>												
Revenues, Current . . . . . Pagodas	12,74,477	15,58,812	16,29,562	19,84,857	19,67,513							
Arrears of do. . . . . do.	2,99,625	5,58,788	6,01,410	2,35,024	1,82,184							
<b>Total . . . . .</b>	<b>15,74,102</b>	<b>21,17,600</b>	<b>21,30,972</b>	<b>22,19,881</b>	<b>21,49,697</b>							
<b>MADRAS.—Ceded &amp; Conquered Provinces:</b>												
Revenues, Current . . . . . Pagodas	—	20,25,093	75,93,033	71,21,358	65,19,888							
Arrears of do. . . . . do.	—	1,98,658	5,98,564	4,84,965	4,22,856							
<b>Total . . . . .</b>	<b>—</b>	<b>22,23,751</b>	<b>81,91,597</b>	<b>76,06,223</b>	<b>69,42,744</b>							
<b>BOMBAY.—Ancient Possessions:—</b>												
Revenues, Current, and Arrears Rupees	—	2,70,465	3,96,853	3,07,043	14,28,240							
Ceded and Conquered Provinces:—		19,06,304	30,53,010	1,30,24,793	1,28,80,465							
Revenues, Current, and Arrears Rupees	—	21,76,769	34,49,863	1,33,31,836	1,43,08,075							
<b>Total . . . . .</b>	<b>—</b>	<b>21,76,769</b>	<b>34,49,863</b>	<b>1,33,31,836</b>	<b>1,43,08,075</b>							
<b>THE PUNJAB . . . . .</b>												
Revenues, Current, and Arrears Rupees	—	—	—	—	—							
Ceded and Conquered Provinces:—		—	—	—	—							
Revenues, Current, and Arrears Rupees	—	—	—	—	—							
<b>Total . . . . .</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>							

\* The ancient and modern possessions are not stated separately after 1829-30.

† The Land Revenue is not shown separately, but is included in the general head "Receipts of the Province of Sindh," in the Bombay accounts.

‡ No return.

## CHAPTER VIII.

### THE LAND-TENURES OF BRITISH INDIA.—ZEMINDAR, RYOTWAR, AND VILLAGE SETTLEMENTS.

AN important feature in the condition of British India still requires elucidation, before entering on the details of the fearful strife which, commencing in the form of a partial and purely military mutiny, speedily assumed a more general and formidable character.

The tenure of land in India is a subject intimately connected with that of annexation, and of the question regarding the mode in which our subjects in Oude and other provinces, have been, and are to be, dealt with. The defects and inequalities of the existing land-tenures have long been viewed by the author as calculated to prevent the English government from taking deep root in the affection and confidence of their native subjects; so much so, that, in the spring of 1857, he framed a brief exposition of the leading facts of the case, intending to publish it in the form of a pamphlet. While the proof-sheets were passing through the press, the tidings of the first outbreak of the mutiny reached England, and each mail brought intelligence more alarming than its predecessor.

It was no time to discuss proprietary rights and landed tenures when fire and the sword were raging throughout India, and the publication of the pamphlet was abandoned; but now that the first terrible excitement is over, these questions become more important than ever, because the inquiry into them is essential to the unraveling of the reasons of the partial disaffection of the people, and to the establishment of a policy better calculated to secure their allegiance for the future.

There is no branch of political economy more deserving of attention than the relation in which man stands to the soil from whence the elements of subsistence and other useful products are derived. Hitherto the science, whose elementary rules Adam Smith but partially defined, has been considered chiefly applicable to commerce; but trade, or the barter of commodities, is secondary in importance to production; and the laws which regulate the application of labour and capital to land, constitute the most effective basis of social organisation, and form a

faithful index to the sources of wealth and physical condition of a nation. These remarks have peculiar reference to British India, where the wellbeing of about one hundred and fifty million people, depends in great measure on the territorial laws under which they are governed.

This subject has been a fertile theme for discussion during the last half century, though avowedly less with regard to the condition of the vast Indian population under the supreme control of the sovereign of England, than by reason of its influence on the large amount required by the state, viz., about £17,000,000 per annum, out of a gross revenue of £30,000,000.

Many theories have been propounded, and some experiments tried, for the amelioration of a system confessedly defective, and even oppressive in operation; but in general, the first principles of justice and common sense have been neglected, or so overlaid with words, and encumbered with contradictory and pernicious conditions, that no permanent benefit has accrued therefrom. Hundreds of volumes of theories and speculations have been printed under the titles of "Landed Tenures" and "Revenue Systems;" while honest energy and precious time have been frittered away in profitless discussions, or in futile endeavours to bring impracticable or injurious projects into beneficial operation.

Unfortunately, English statesmen, perplexed with controversies on the relative merits or demerits of the so-called *Zemindar*, *Ryotwar*, and *Village* revenue settlements, and confused with Oriental nomenclature, seem tempted to abandon in despair, as a problem too difficult for them to solve, the adjudication of a question simple in principle, and unembarrassed by details—How may a government tax be levied on land with the least detriment to the proprietor or cultivator? And the administrative authorities, fearful of a diminution of annual income, and often urgently pressed for more revenue, have been unwilling to consider the matter on broad principles, dreading to jeopardise their power of arbitrarily assessing the tillers of the

soil—a power which has been exercised in accordance with the temporary exigencies of the governors, rather than with the means of the governed. It is true that the voluminous despatches of the Court of Directors have teemed with injunctions to their servants in India to be moderate in assessment, to avoid oppressing the people, and to encourage agriculture;\* but all such orders, however well intended, were little better than nugatory, so long as the pecuniary requirements or demands of the state were unconditional and unsettled; and must remain so, at least to any satisfactory extent, until the fee-simple of the land be vested in a proprietary class, and the annual taxation levied bear a just and uniform proportion to the cost of cultivation, the necessities of the cultivator, and the means of laying by yearly a clear though small profit, to accumulate as capital in the hands of the landowners. Until this be done, we shall have, as at present, a nation of peasants, not a prosperous community of various grades and occupations.

The allegation that revenue derived from land is not a tax, scarcely needs refutation. No state can stand with its subjects in the relation of landlord and tenants, either in sympathy, in pecuniary matters, or in general copartnership of interest. Whatever share the government takes of the gross or net produce, be it little or much, is an abstraction from capital, and a tax on the industry and skill of the farmer. The government might as well assume the rights of a *house-lord*, as those of a *land-lord*, and levy a tax on habitations. In the case of India, it is manifestly impossible for a few European functionaries to superintend the operations of several thousand small—minutely small—farmers; or prevent the systematic tyranny and injustice of subordinate (native) officials—evils which the British government have the strongest possible interest to eradicate as one of the worst legacies of Moslem misrule.

In Asia, as in Europe, land, at an early period, constituted the main source of public revenue; the amount of taxation varied in different countries, according to the number and wealth of the population,

\* *Ex gr.*, Letter of 13th August, 1851, which occupies fifty printed folio pages.

† *Lib.* 43, c. 2.

‡ See *Essay on Money*, by John Taylor, Esq., 2nd ed., p. 12.

and their power of resisting oppression; but, generally speaking, the proportion of the gross or net produce claimed by the state, did not exceed the Egyptian fifth devised by Joseph. We read in Genesis, that, in anticipation of famine, Pharaoh, king of Egypt, at the suggestion of the inspired Hebrew, stored in granaries one-fifth of the total produce; and before the seven years of dearth passed, the cultivators parted with everything—cattle, silver, and land—for food. Pharaoh gave back the land on condition of the cultivators paying one-fifth of the produce in perpetuity. The Romans, on their occupation of Egypt, found this tax still existing; and it remains, probably, to the present day.

The land-tax varied in different countries. Among the Jews, Greeks, Romans, and ancient Persians, it was one-tenth; in *Sicily*, the Romans levied one-tenth, and Cicero indignantly protested against the “infamous Verres” taking more. According to Livy,† *Spain* was taxed at one-twentieth. The Greek authorities, previous to the time of Solon, took a sixth of the yield from the owner of the soil.‡

In *England*, the land-tax, calculated on a very moderate valuation of estates by the government of William III. (A.D. 1692), ranged from 1s. to 4s. in the pound sterling. *France* had its “rent foncière” fixed at one-fifth of the net produce, and this was generally complained of as too high; *Tuscany*, one-fifth of the net rent; *Venetian territories*, one-tenth the rent; *Milanese*, £8 18s. per cent. on valuation, or 1s. 9d. in the pound; *Parma*, 9d. per acre; *Bologna*, 2d. per acre; *Persia* (government share), one-tenth; *Bokhara*, one-fourth; *China*, one-tenth, but assessed so moderately as not to exceed one-thirtieth of the ordinary produce; *Java*, one-fifth; *Birmah*, one-tenth; *Cochin China*, one-sixth. In *Ceylon*, during the twelfth century, on arable lands, one-tenth; high grounds, free.

Whoever were the first colonizers of India, they probably settled in village communities, and introduced, for the furtherance of those measures of general utility and protection which are the primary objects of all legitimate government, municipal taxation on the chief commodity they possessed—land.

Scanty as are the records of ancient India, which even the indefatigable researches of modern scholars have disintombed, they are decisive on the point of

the actual proprietorship of the land being vested in the people; though it was nominally attributed, in public documents, either to the immediate superior of the addressing parties, or to their king; who, whatever the extent of his territory, or nature of his power, appears to have been equally styled, in the magniloquence of Eastern hyperbole, Lord of the Earth, Sea, and Sky.

The most ancient, and least controverted, authority on this matter, is found in the famous *Institutes of Menu*. Orientalists have ascribed to this code at least as early a date as the ninth century before Christ (880 B.C.), and they regard it as affording a true and graphic picture of the state of society at that period, before the torture of witnesses or criminals was sanctioned by law, or widow-burning and infanticide crept into custom, with other horrible and defiling practices of modern Brahminism.\*

The *Institutes* set forth, as a simple matter of fact, that cultivated land is "the property of him who cuts away the wood, or who first clears and tills it." The state is declared entitled to demand a twelfth, an eighth, or a sixth part "of grain from the land, according to the difference of the soil, and the labour necessary to cultivate it." This refers to times of peace; but "a military king, who takes even a fourth part of the crops of his realm at a period of urgent necessity, as of war or invasion, and protects his people, commits no sin. Serving-men, artisans, and mechanics, must assist by their labour (twelve days per annum), but at no time pay taxes." One of the ancient commentators (for there were several) declares, that "the king who takes more is infamous in this world, and consigned to Nareka (the infernal regions) in the next." And it appears to have been pretty generally the case, that Hindoo sovereigns received from their subjects, during peace, one-sixth, and during war one-fourth, of the produce of their fields. Some took much less than this. For instance, in the mountainous region of Coorg (an ancient Hindoo principality, which, until very recently, retained its independence), the tax demanded by the native government was only a tenth.† But under all Hindoo governments, individual

proprietors of land appear to have uniformly possessed a "dominion so far absolute as to exclude all claims, excepting those of the community who protected it;"‡ the infallible criterion being, that it was saleable, mortgageable, and in every respect a transferable commodity, where the laws of hereditary tenure were not concerned. The law seems to have been regarded as incontestable, that "he who has the tribute from the land, has no property in the land;" nor could the state or sovereign, in any case, be the heir to the landed property of its subjects. Personal effects might fall to, or be seized by the king; but according to the Hindoo law, land could "only escheat to the township,"§ excepting in the little state of Tanjore. Mortgages, deeds of sale, and free grants for religious and charitable purposes, as well as to private persons, exist, of various dates, in many Indian languages. One of the oldest and most curious of these title-deeds, engraved on copper, bearing date B.C. 23, is minutely described and translated by Dr. Wilkins, in the opening volume of the *Asiatic Researches*.||

The Greek accounts of the invasion of the Punjab by Alexander the Great (B.C. 333), tend to prove the people of Western India to have then possessed an acknowledged proprietary right in the soil; in common phraseology, the land belonged to the people—the tax to the king.

When the Mohammedans invaded, and gradually subjected, the majority of the states which previously existed in India, they were ostensibly guided in their dealings with the subjugated people by the rule of the Koran, which holds forth, in such cases, conversion, with the dismal alternatives of death or confiscation of property. But the Moslem rule was spread over the greater part of India more by intrigue, and constant interference in the quarrels of the native princes, than by any concerted and systematic scheme of conquest; and, with the exception of a few great battles (especially those on the plains of Paniput, in Northern India¶), their usurpations were very gradual, and were rather the contests of a powerful sovereign against petty neighbouring princes, whose territories he desired to absorb, than the deadly struggle of creed and race, of Mohammedan against Hindoo. Had utter confiscation of property, and total annihilation of all territorial rights, been the habitual, or even

\* See *ante*, p. 14. † Wilks, vol. i., p. 144.

‡ Wilks' *South of India*, vol. i., p. 111.

§ *Ibid.*, vol. i., p. 196.

|| *Asiatic Researches*, vol. i., p. 123.

¶ See *ante*, pp. 81 and 179.

the frequent practice of Mohammedan sovereigns, it is evident that the Hindoo chiefs who swelled their ranks, and the Hindoo financiers who invariably levied their revenues, and were entrusted with the management of their treasuries, would have of necessity acted a different, and according to European notions, a more patriotic part. General Briggs, who has bestowed much study on the subject, declares that no Mohammedan prince claimed the ownership of the soil. It must, however, be admitted, that the despotism exercised, neutralised the territorial rights of proprietors, and was a source of cruel oppression.

Thus Alla-u-Deen, who reigned at Delhi from 1294 to 1315 A.D., spread misery and desolation among his subjects, both Mussulman and Hindoo, by his insane and ferocious avarice. We are told that, A.D. 1300, he "ordered a tax of half the real annual produce of the lands, to be raised over all the empire, and to be regularly transmitted to the exchequer." "The farmers were confined to a certain proportion of land, and to an appointed number of servants and oxen to cultivate the same. No grazier was permitted to have above a certain number of cows, sheep, and goats, and a tax was paid out of them to the government. He seized upon the wealth, and confiscated the estates, of Mussulmans and Hindoos, without distinction, and by this means accumulated an immense treasure."\*

On the establishment of the famous dynasty of the Great Moguls by Baber in 1526, some attention was paid to a regular territorial assessment; but it was not till the reign of Akber, the grandson of Baber, and son of the fugitive and long-exiled monarch, Humayun, that effective measures were adopted for the systematic assessment of the revenues, and especially for the commutation of produce into money; a very delicate and difficult measure in a country like India, which, throughout its vast extent, is remarkable for the extraordinary variations in the quantity and in the value of its annual produce.

Akber, who reigned from 1556 to 1605 (cotemporary with Elizabeth of England), has been held up as the model of Indian

financiers, chiefly on the strength of the records of his measures and opinions contained in the *Ayeen Akbery*, the famous work of his gifted and confidential minister, the ill-fated Abul Fazil. The tone of the writer is too much that of indiscriminate panegyric for the facts related by him not to be open to suspicion; but even on his evidence, the revenue system adopted by Akber, though full of intricacies and impracticable classifications, is, as Rickards† and others have clearly shown, founded on computations based on the produce of the soil.

Evidence that the ordinary assessment of Hindoo sovereigns did not exceed one-sixth of the produce, is given in the *Ayeen Akbery* itself.‡ Among other instances to this effect may be cited that of the king of Cashmere, one of whose earliest acts of power (A.D. 1326) was the confirmation of the ancient land-tax, which amounted to 17 per cent., or about one-sixth of the total produce. Akber appears to have exacted first a fifth, and afterwards a third of the produce of his territories; or, if commuted into money, a fourth of the net income. The attempts to enforce these latter demands are said to have "endangered the stability of the imperial throne."§ One of Akber's most active instruments, Mozuffer Khan, then governor of Bengal and Bahar, was besieged by the oppressed landowners in the fort of Tondah, compelled to surrender, and then put to death. Rajah Todar Mul (the famous Hindoo financier, whose mode of collecting the revenue in the silver coin called 'Tunkha, gave its name to the "Tunkla system") was appointed to succeed Rajah Khan; but he failed in subduing the insurrection, and was superseded.||

Aurungzebe (A.D. 1658 to 1707), the most powerful, and, until blinded by ambition and bigotry, the most astute of the Great Moguls, was successful in his career of aggrandisement up to the period when his subjects became worn-out and well-nigh ruined by the excessive taxation needed to meet the exigencies of the immense armies occupied during a long series of years—under the simultaneous command of the emperor himself, his sons, and at length his grandsons—in Central and Southern India. It was probably as much to supply a failing treasury, as from a more fanatical motive, that Aurungzebe imposed the hated *Jezia*, or capitation-tax, on infidels, which so heavily weighed down the whole Hindoo popula-

\* Ferishta's *Hindoostan*, translated by Dow, vol. i., pp. 291-2. † Rickards, vol. i., p. 316.

‡ Gladwin's *Translation of the Ayeen Akbery*, vol. i., 245-278.

§ Rickards, vol. i., p. 16.

|| Stewart's *Bengal*, pp. 166-176.



tion; but let the cause have been what it would, his unjust and oppressive exactions strengthened the arms of those deadly foes whom the despised Hindoo, "the Mountain Rat" Sivajee, had formed into a nation, despite the efforts of the mighty man of war, who eventually, in extreme old age, but still in possession of marvellous physical and mental power, was well-nigh hunted to death by the Mahrattas.\*

After his decease the huge empire fell rapidly to ruins; and, throughout its provinces, Mogul and Mahratta delegates vied in exacting tribute from the wretched cultivators, sometimes on their master's account, sometimes on their own. It would, of course, be folly to look for precedents in a state of society in which no general rule prevailed beyond—

"The simple plan;  
That they shall take who have the power,  
And they shall keep who can."

Comparatively happy were those districts in which some chief or governor contrived to maintain his own real or assumed rights, and protected his people against all oppression but his own. It was at this time that so many of the nominal servants of the weak and short-lived Mogul emperors contrived gradually to make themselves independent sovereigns, playing, however, fast and loose with their nominal master, for fear of the Mahrattas, and further kept in check by frequent strife with their neighbours and their subjects.

The English East India Company now began to assume the position of a territorial power. The service rendered by a patriotic medical officer, named Hamilton, to the emperor Feroksheer, in 1716,† secured the much-coveted imperial firman, or warrant, to become landowners in Bengal, by the purchase of thirty-eight villages from private proprietors.‡ This purchase in fee-simple formed the nucleus of the Calcutta presidency.

The only considerable state which, contemporaneously with the East India Company, could boast any continuance of a strong or even settled government, was the ancient Hindoo kingdom of Mysoor, over which the Mohammedan adventurer, Hyder Ali, by mingled force and fraud, obtained undisputed sovereignty. One of his early acts of power is said to have been to decree

the appropriation of the profits of the land in the following proportions:—Cultivator,  $5\frac{1}{2}$ ; proprietor,  $1\frac{1}{2}$ ; government, 3=10.

According to Colonel Wilks, Hyder exacted a full third of the whole produce, instead of the ancient rate of assessment, which had not exceeded a sixth: and the same authority states, that the usurper's entire system of "government was a series of experiments how much he could extort from the farmer without diminishing cultivation."§ In the records of his administration, abundant facts for warning may be found; but few, indeed, worthy the imitation of Christian rulers, excepting his energetic and discriminating measures for the execution of public works, especially for the purposes of traffic and the irrigation of the land.

We are imperfectly informed as to the period when, or the extent to which, the Mohammedans broke down the ancient Hindoo Village system of petty municipalities, under whose regulations the revenue, assessed on separate communities, was delivered over to the state through the intervention of a headman chosen by the villagers, the government officers not being brought in contact with the cultivators. In many places, officers, called by the vague and general name of zemindars, were appointed by the Moguls; and these "middlemen" either farmed the revenues somewhat after the old French system, or received grants of territory, on condition of making certain payments in the form of *peishcush*, or tribute, or of rendering stipulated services to the state. When the zemindars or talookdars—as they were called in Bengal and Bahar; or polygars, as they were termed in Southern India—were introduced, the Village system underwent considerable change by reason of a superior proprietorship being set up by the government officers, who exacted the claims, and exercised the rights, of feudal barons; and the ryots, or cultivators, paid each their proportion of the produce, or its money equivalent, direct to the zemindars or polygars; but the system was too deeply rooted in the hearts of the people to be entirely eradicated. It still exists, more or less perfectly, over large districts; and its peculiar features are in the main invariable, though the names and even duties of the functionaries employed differ according to language and local circumstances. Each village forms a distinct society, and its affairs constitute the chief concern of

\* See *ante*, p. 153.

† *Idem*, p. 240.

‡ Stewart's *Bengal*, p. 399.

§ Wilks' *South of India*, vol. i., pp. 155—218.

the individuals residing within its limits. As the revenue is furnished to the state (or, it may be, to a zemindar, or to a talookdar or feudal chief, as in Oude and N. W. India) by all in relative proportions, each man is interested in the industry and prosperity of his neighbour. By an equal apportionment, taxation falls fairly on the whole; by a division of duties, general advantage is obtained: instead of all going to market, one man is deputed to proceed thither, and the rest to attend to the crops or other special duty: the little corporation appoints its mayor or chief (*Potail*); there is also the registrar (*Putwarree*), the clerk and accountant, and surveyor (*Bullae*); the policeman (*Chowkeedar*), the minister (*Pursae*), and the schoolmaster of the parish; the carpenter, blacksmith, barber, washerman, &c.; the tracer (*Puggee*), hunter or wild beast destroyer (*Byadhee*);—and each receives a stipulated portion of the produce; some of which is set aside to maintain the hospitalities of the village.

The *Potail* is the medium between the officers of government and the villagers: he collects their dues, enforces payment by such means as are sanctioned by usage; in some instances rents the whole of his village from government. Whether this be the case or not, the *Potail*, besides a tract of rent-free land—varying from 10 to 200 beegahs (a beegal is about one-third of an acre), according to the size and population of the village—receives certain established fees, and also dues, generally in kind, such as from two to eight seers (a seer is about 2lb.), from each beegah, of grain cultivation, and a share of the sugar and other produce. The *Potails* generally maintain a respectable position; though not exempt from much occasional bickering, jealousy, charges of favouritism, and corruption, such as are common to all small communities.

The *Putwarree*, or village registrar, does not always hold his office by hereditary right: he is sometimes elected; sometimes a government servant; but enjoys rent-free land and dues under the *Potail*, who recommends to the office when it is vacant by death or from malversation: there are, however, many instances of very old hereditary tenures.

The *Bullae*, *Bullawa*, or *Dher*, ought to know every inhabitant of the village and his possessions; the landmarks, boundaries, tanks, and the traditions respecting them, are expected to be within his cog-

nizance, as his presence and evidence are essential in all landed disputes. When travellers pass, he is their guide to the precincts of the village, and is responsible for their safety and for that of merchandise in its transit: in this and other matters he is the representative of the *Potail*, for whom he acts as spy, messenger, and newsmonger.

The *Pursae*, or priest, is also the village astrologer, and, with the aid of some old books, professes to announce good or bad seasons, fixes the hour for putting the seed corn into the ground, and is consulted on divers occult matters. He is, however, generally poor, and not held in much esteem, and is supported by a few beegahs of rent-free land, and by petty fees for officiating at marriages, births, naming of children, and funerals.

The *Chowkeedar* watches over the lives and property of the villagers; and in some places, as in Guzerat, is assisted by a detective police, named *Puggees* (*pug* meaning foot), who trace the flight of thieves or murderers from one village to another, by their respective footprints, with extraordinary sagacity. The *Byadhee*, or hunter, fills an hereditary office for the destruction of wild beasts, in villages surrounded by uncultivated tracts, where tigers, elephants, and other animals abound.

Sir John Malcolm observes, that in most parts of Central India the *Potail* held what was deemed an hereditary office, with a defined quantity of land in the village rent-free: he says, these men, in many cases, can support their claim to the rights and lands they enjoy, for eight, nine, or ten generations.\* Grant Duff furnishes much forcible evidence to the same effect, especially with regard to the Mahrattas. "The greatest Mahratta commanders, or their principal Brahmin agents, were eager to possess their native village; but although vested with the control, they were proud to acknowledge themselves of the family of the *Patell* [*Potail*], or *Koolkurnee*; and if heirs to a *Miras* field,† they would sooner have lost wealth and rank than been dispossessed of such *wutum* or inheritance. Yet, on obtaining the absolute sovereignty, they never assumed an authority in the interior village concerns beyond the rights and privileges acquired by birth or pur-

\* *Central India*, vol. ii., p. 14.

† Denoting a field held by hereditary or proprietary tenure, as distinct from that of an *Oopree*, or mere tenant at will.







